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MILITARY HEALTH SERVICE SYSTEM AMBULATORY WORK UNIT

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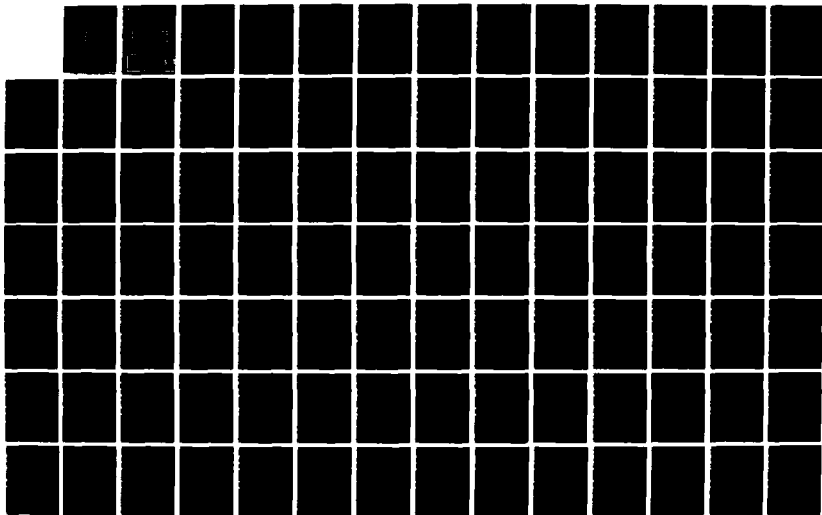
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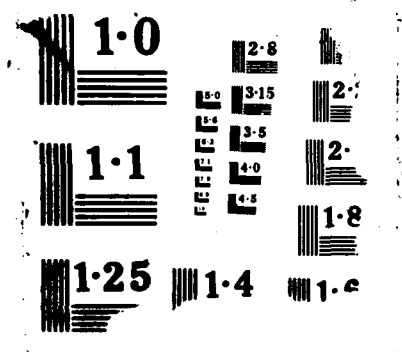
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**UNITED STATES ARMY  
HEALTH CARE STUDIES  
AND  
CLINICAL INVESTIGATION ACTIVITY**

**MILITARY HEALTH SERVICE SYSTEM  
AMBULATORY WORK UNIT  
(AWU)**

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MEASUREMENT WORKING GROUP**

**REPORT HR88-001**

**1 APRIL 1988**

**US ARMY  
HEALTH SERVICES COMMAND  
FORT SAM HOUSTON, TEXAS**

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<p><b>INTRODUCTION:</b> This report presents the recalibration and expansion of the outpatient portion of the three digit Health Care Unit (HCU). Recalibration was necessary for four reasons: (1) the most recently available Medical Expense and Performance Reporting System (MEPRS) data could be used; (2) factors could be derived for subaccounts previously not included; (3) present and projected changes in MEPRS stepdown methodology could be incorporated to better align factors with actual funding methods; and (4) an ambulatory workload measure would result which would be even more compatible with the diagnosis related group (DRG) based inpatient work unit currently under development. Fiscal Year 1984, 1985, and 1986 tri-service MEPRS data were used for the analysis.</p>					
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## ITEM 19 (Continued):

RESULTS: The methodology used resulted in an ambulatory workload credit system, renamed the Ambulatory Work Unit (AWU), which was better aligned with the method by which clinics were actually funded. The AWU demonstrated high stability over time. For those individual subaccount weights which did demonstrate instability an appropriate procedure was used to adjust for this instability. Subaccount AWU weights indicated that the AWU demonstrated substantial variance in interval scale measurement. This same variance was demonstrated by the range of relative resource intensity of facility ambulatory output. The AWU provided substantially greater credit to ambulatory care than either the two digit HCU or the three digit HCU. The increased emphasis on ambulatory care was a result of four factors: (1) modifications in the weight derivation methodology; (2) use of total ambulatory visits rather than only outpatient visits; (3) reallocation of inpatient visit non-clinician costs to ambulatory clinics; and (4) a conservative decision tree. Diagnosis related group based inpatient case complexity was used as an outside criterion for the examination of the validity of the AWU by examining the predictive relationships between DRG case complexity and AWU resource intensity in matched medical specialties. The relationship between DRG case complexity and AWU resource intensity was positive, strong, and statistically significant for all three service branches separately and when combined into an overall Military Health Service System (MHSS) equation. Regression analysis indicated that two separate predictive relationships were present for medical and surgical specialties. Expanding the model to account for specialty markedly increased the strength of the positive relationship.

RECOMMENDATIONS: The AWU is a resource intensity sensitive weighted ambulatory index compatible with inpatient DRG weighting and can be implemented concomitantly with DRG inpatient weights. Further, the AWU would require relatively little funding. The following recommendations are made:

- a. Implement the AWU 1 October 1988, as the weighted classification of ambulatory workload within MHSS.
- b. Mandate use of the AWU wherever workload exhibits are submitted, to include but not limited to MEPRS reports and financial displays.
- c. Require that the AWU be the ambulatory workload measurement used in conjunction with the DRG based inpatient work unit in the resource allocation systems developed by the service branches in response to the National Defense Authorization Act for Fiscal Year 1987.
- d. Initiate a study to identify and enumerate appropriate ambulatory surgery procedures for eventual inclusion in the workload system.
- e. Establish uniform criteria for the reporting of data in clinic subaccounts. Implement procedures to require the approval of subaccounts for reporting workload prior to allowing workload to be reported.
- f. Request that the three service branches petition for specific exceptions for unusually expensive programs and develop adjustment factors to provide explicit added credit for these unique mission responsibilities
- g. A minimum of one year of data should be accumulated prior to deriving a computed AWU weight for any new subaccount.
- h. Evaluate the AWU for recalibration prior to Fiscal Year 1990.
- i. Following initial evaluation of weight stability, evaluation of scale stability should be conducted every other year.

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## GLOSSARY

ASD(HA) - Assistant Secretary of Defense (Health Affairs)  
CC - Complication or Comorbidity  
CCI - Case Complexity Index  
CWU - Composite Work Unit  
DoD - Department of Defense  
DRG - Diagnosis Related Group  
EAS - Expense Assignment System  
FY - Fiscal Year  
HCFA - Health Care Financing Administration  
HCU - Health Care Unit  
ICD-9 - International Classification of Disease, 9th Revision  
ICD-9-CM - International Classification of Diseases, 9th Revision  
with Clinical Modification  
ICPM - International Classification of Procedures in Medicine  
ICU - Intensive Care Unit  
IPDS - Army Individual Patient Data System.  
MEPRS - Medical Expense and Performance Reporting System  
MTF - Medical Treatment Facility  
MHSS - Military Health Service System  
NEC - Not Elsewhere Classified  
PRIMUS - Primary Medical Care for the Uniformed Services  
RII - Resource Intensity Index  
SAS - Statistical Assignment Statistic  
TPMWG - Tri-Service Performance Measurement Working Group  
UCA - Uniform Chart of Accounts

## SUMMARY

This report presents the recalibration and expansion of the outpatient portion of the three digit Health Care Unit (HCU). Recalibration was necessary for four reasons: (1) the most recently available Medical Expense and Performance Reporting System (MEPRS) data could be used; (2) factors could be derived for subaccounts previously not included; (3) present and projected changes in MEPRS stepdown methodology could be incorporated to better align factors with actual funding methods; and (4) an ambulatory workload measure would result which would be even more compatible with the diagnosis related group (DRG) based inpatient work unit currently under development. Fiscal Year 1984, 1985, and 1986 tri-service MEPRS data were used in the analysis.

The methodology used in this report resulted in an ambulatory workload credit system better aligned with the method by which clinics are funded through the appropriation process. Recalibration and expansion also resulted in an ambulatory workload index that significantly differs from ambulatory workload measures to date, including the outpatient component of the current HCU. To clearly differentiate this measure from previous indices it has been renamed the Military Health Service System (MHSS) Ambulatory Work Unit (AWU). A complete listing of AWU weights is included in Table i, immediately following this report summary.

As a scale, the AWU demonstrated high stability over time. For those individual subaccount weights which did demonstrate instability over time an appropriate procedure was used to adjust for this instability. Subaccount ambulatory location parameter costs and the AWU weights that were derived from these costs indicated that the AWU demonstrated substantial variance in interval scale measurement. This same variance was demonstrated by the range of relative resource intensity of facility ambulatory output. This range in facility output resource intensity exhibited by each branch of service demonstrated that the AWU discriminated in facility relative resource intensity of ambulatory output. This discrimination of output was considered a necessary prerequisite for implementation.

The AWU provided substantially greater credit to ambulatory care than either the two digit HCU or the outpatient three digit HCU. The increased ambulatory emphasis of the AWU relative to inpatient care was a result of four factors; (1) modifications in the weight derivation methodology, (2) use of total ambulatory visits in the calculation of AWUs rather than only outpatient visits, (3) reallocation of inpatient visit non-clinician costs to ambulatory clinics prior to calculation of AWU factors, and (4) a conservative decision tree in the calculation of AWU factors.

Diagnosis related group (DRG) case complexity was used as an outside criterion for the examination of the validity of the AWU.

Case complexity based on DRGs was used as the criterion for two reasons: (1) DRG case complexity was a much more developed workload measurement system; and (2) Congress mandated that DRGs be used to measure inpatient productivity in MHSS hospitals. The validity of the AWU as a measurement instrument was evaluated by examining the predictive relationships between DRG based inpatient case complexity and AWU based ambulatory resource intensity in matched medical specialties. Analysis demonstrated that the relationship between DRG case complexity and AWU resource intensity was positive, strong, and statistically significant for all three service branches separately and when combined into an overall MHSS correlation. This relationship was verified by regression analysis. Regression analysis also indicated that two quantitatively separate, predictive relationships were present between DRG case complexity and AWU resource intensity; one relationship for medical specialties and a second for surgical specialties. Expanding the model to account for specialty served to substantially increase the strength of the positive relationship between DRG case complexity and AWU resource intensity.

The AWU represents a resource intensity sensitive weighted ambulatory index compatible with inpatient care DRG weighting and can be implemented concomitantly with DRG inpatient weights. Further the AWU would require relatively little funding to

implement due to its compatibility with existing data collection methods and reporting requirements.

In view of the findings of this report the following recommendations are made:

a. Implement the AWU as the weighted classification of ambulatory workload within MHSS. Make implementation of the AWU effective 1 October 1988.

b. Mandate use of the AWU wherever workload exhibits are submitted, to include but not limited to MEPRS performance reports and financial displays.

c. Require that the AWU be the ambulatory workload measurement used in conjunction with the DRG based inpatient work unit in the resource allocation systems developed by the service branches in response to the National Defense Authorization Act for Fiscal Year 1987.

d. Initiate a study to identify and enumerate appropriate ambulatory surgery procedures for eventual inclusion to the workload system consisting of AWU ambulatory measurement and DRG based inpatient measurement.

e. Establish uniform criteria for the reporting of data in clinic subaccounts. Implement procedures to require the approval of subaccounts for reporting workload prior to allowing workload to be reported. Disallow workload reported in unapproved subaccounts.

f. Request that the three service branches petition for specific exceptions for unusually expensive programs and develop unique adjustment factors to provide explicit added credit for these unique mission responsibilities.

g. A minimum of one fiscal year of data should be accumulated prior to deriving a computed AWU weight for any new subaccount. Two years of data would be preferred.

h. Two fiscal years of data are required to recalibrate the AWU. To coincide with budgetary data submission timetables, an evaluation of weight stability should be conducted first quarter FY 1989, to determine if the AWU requires recalibration prior to FY 1990.

i. Following initial evaluation of weight stability in first quarter FY 1989, evaluation of scale stability should be conducted every other year. It is anticipated that this frequency of scale evaluation could be modified as historical data are accumulated.

TABLE i  
MILITARY HEALTH SERVICE SYSTEM  
AWU WEIGHTS

MEDICAL CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BAA	INTERNAL MEDICINE	.0395
BAB	ALLERGY	.0083
BAC	CARDIOLOGY	.0364
BAE	DIABETIC	.0267
BAF	ENDOCRINOLOGY (METAB)	.0399
BAG	GASTROENTEROLOGY	.0338
BAH	HEMATOLOGY	.0455
BAI	HYPERTENSION	.0232
BAJ	NEPHROLOGY	.0629
BAK	NEUROLOGY	.0364
BAL	NUTRITION	.0127
BAM	ONCOLOGY	.0466
BAN	PULMONARY DISEASE	.0410
BAO	RHEUMATOLOGY	.0343
BAP	DERMATOLOGY	.0216
BAQ	INFECTIOUS DISEASE	.0395
BAZ	MEDICAL CLINICS NEC	.0395

SURGICAL CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BBA	GENERAL SURGERY	.0345
BBB	CARDIOVASCULAR AND THORACIC SURGERY	.0377
BBC	NEUROSURGERY	.0583
BBD	OPHTHALMOLOGY	.0276
BBE	ORGAN TRANSPLANT	.0723
BBF	OTORHINOLARYNGOLOGY	.0305
BBG	PLASTIC SURGERY	.0406
BBH	PROCTOLOGY	.0234
BBI	UROLOGY	.0397
BBJ	PEDIATRIC SURGERY	.0496
BBZ	SURGICAL CLINICS NEC	.0345



TABLE i (CONT'D)  
MILITARY HEALTH SERVICE SYSTEM  
AWU WEIGHTS

OBSTETRICAL/GYNECOLOGICAL CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BCA	FAMILY PLANNING	.0249
BCB	GYNECOLOGY	.0236
BCC	OBSTETRICS	.0260

PEDIATRIC CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BDA	PEDIATRIC	.0200
BDB	ADOLESCENT	.0254
BDC	WELL BABY	.0156
BDZ	PEDIATRIC CARE NEC	.0200

ORTHOPEDIC CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BEA	ORTHOPEDIC	.0362
BEB	CAST	.0200
BEC	HAND SURGERY	.0232
BED	NEUROMUSCULOSKELETAL SCREENING	.0133
BEE	ORTHOPEDIC APPLIANCE	.0326
BEF	PODIATRY	.0211

PSYCHIATRIC/MENTAL HEALTH CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BFA	PSYCHIATRY	.0346
BFB	PSYCHOLOGY	.0295
BFC	CHILD GUIDANCE	.0279
BFD	MENTAL HEALTH	.0332
BFE	SOCIAL WORK	.0213

TABLE i (CONT'D)  
MILITARY HEALTH SERVICE SYSTEM  
AWU WEIGHTS

PRIMARY MEDICAL CLINIC SUBACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BHA	PRIMARY CARE	.0263
BHB	MEDICAL EXAMINATION	.0326
BHC	OPTOMETRY	.0163
BHD	AUDIOLOGY	.0150
BHE	SPEECH PATHOLOGY	.0232
BHG	PRIMUS	.0263

TWO DIGIT AMBULATORY CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
BG	FAMILY PRACTICE	.0268
BI	EMERGENCY MEDICAL	.0335
BJ	FLIGHT MEDICINE	.0286
BK	UNDERSEAS MEDICINE	.0304

DENTAL CARE ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
CA	DENTAL SERVICES	.0063
CB	TYPE 2 DENTAL PROSTHETIC LABORATORY	.0017
CC	TYPE 3 DENTAL PROSTHETIC LABORATORY	.0023

SPECIAL PROGRAMS CLINIC ACCOUNTS\*

CODE	SUBACCOUNT WORK CENTER	AWU WEIGHT
FAB	TYPE 1 DENTAL PROSTHETIC LABORATORY	.0021
FAE	ALCOHOL AND DRUG ABUSE/REHABILITATION PROGRAM	.0332
FBA	COMMUNITY HEALTH	.0389
FBG	OCCUPATIONAL HEALTH	.0255

\*Notes: Planned MEPRS changes will result in shifts in certain ambulatory subaccounts: FBA - Community Health to BHF - Community

Health; FAE - Alcohol and Drug/Rehabilitation Program to BFF - Substance Abuse; and FBG - Occupational Health to BHG - Occupational Health. In these cases the identified weight would also transfer. In FY 1988, ambulatory clinics are scheduled to include BHH - PRIMUS clinics and this subaccount has been assigned the weight for BHA - Primary Care until a compatible unique weight can be developed.

## ACKNOWLEDGMENTS

The United States Army Health Care Studies and Clinical Investigation Activity provided personnel and equipment resources necessary for the completion of this study. The Office of The Surgeon General, United States Air Force, provided personnel resources necessary for study completion. The Fort Detrick Data Processing Center provided exemplary software and hardware support to the Tri-Service Performance Measurement Working Group throughout the study period.

This study required the participation of personnel from the Office of the Assistant Secretary of Defense (Health Affairs), Office of The Surgeon General of each of the three service branches, as well as numerous field operating agencies. Without the interest and cooperation of these various offices this study could not have been completed.

## MILITARY HEALTH SERVICE SYSTEM

### AMBULATORY WORK UNIT

#### CHAPTER 1. INTRODUCTION

a. Background. On 28 June 1985, in response to recommendations made by the Blue Ribbon Panel on Sizing Department of Defense Medical Treatment Facilities, the Secretary of Defense approved the Health Care Unit (HCU) as the standard for workload measurement in the Military Health Service System (MHSS). On 24 July 1985, the Assistant Secretary of Defense (Health Affairs) [ASD(HA)] implemented the HCU as an interim measure until a more refined measure could be developed. As a result, the HCU has been made a performance measure in the budget submissions of the Office of Secretary of Defense and Office of the President. To this end the Medical/Dental Workload Exhibit, OP-13, in the revised Department of Defense (DoD) Budget Guidance Manual also directs use of the HCU.

Health Care Unit production by a facility represents a weighted sum of workload derived from dispositions, bed days, and ambulatory outpatient visits. These weights represent relative resource intensity using total distributed cost as the measure of intensity. Weighting was accomplished by utilizing total facility production costs to partition this workload into weighted product categories.

Work first began on the HCU as a possible replacement to the Composite Work Unit (CWU) in 1980 (Hodson, et al., cited in Vector, 1983). The CWU had previously been used as the primary measure of hospital output. In 1983, the HCU was further refined using Fiscal Year (FY) 1980, 1981, and 1982 Uniform Chart of Accounts (UCA) data [UCA has since been renamed the Medical Expense and Performance Reporting System (MEPRS)]. The HCU implemented at the time of this study was based on MEPRS two digit summary account cost data. Use of a summary account level classification resulted in six inpatient, 11 outpatient, and two dental workload cost categories. Although HCU weights were developed for dental accounts, dental HCUs were not being used for productivity measurement. Following determination of summary account production costs, these costs were divided by an overall average cost per disposition. Division by an average disposition cost normalized these costs such that the average inpatient disposition was weighted 1.0 HCUs. Similarly, an outpatient visit weighted by an outpatient HCU weight could be interpreted as a proportion of an average disposition. Thus, inpatient and outpatient workload could be added into an overall output measure.

The Tri-Service Performance Measurement Working Group (TPMWG) was established by ASD(HA) in October 1985 to develop productivity measures which would promote more efficient and cost-effective quality medical care. One recommendation made by

the TPMWG was an immediate modification of the HCU from the MEPRS two digit summary account to the three digit subaccount work center level. On 1 November 1986, the Medical Expense and Performance Reporting System Three Digit Health Care Unit Part 1 - Study Report, and Part 2 - Study Report Appendices, was published (Optenberg and Coventry, 1986). Using FY 1984 tri-service MEPRS data this report expanded the two digit HCU to the three digit level and evaluated the three digit HCU as a potential replacement to the two digit HCU. In evaluating the three digit HCU as a potential replacement to the two digit HCU, the report authors reached several conclusions in regard to the three digit HCU. These conclusions included the following:

(1) Inpatient as well as outpatient care three digit HCU weights demonstrated substantial variation from their respective two digit weights that would make the three digit HCU more sensitive to shifts in patient case complexity than the two digit HCU.

(2) The three digit inpatient HCU would provide much greater credit to intensive care (ICU) workload and less credit to non-ICU medical, surgical, and pediatric care as well as psychiatric care.

(3) The three digit HCU would provide substantially greater credit to outpatient care relative to inpatient care than the two digit HCU.

(4) The three digit HCU would place substantially greater emphasis on the patient disposition relative to length of stay than two digit HCU.

(5) The three digit HCU would provide substantially greater financial credit when patient hospital stay was shortened and shifted to the outpatient setting.

Although the results of the HCU analysis supported the replacement of the two digit HCU with the three digit HCU, the study authors recommended that the three digit HCU not replace the two digit HCU as currently designed due to recent congressional legislation. The National Defense Authorization Act for Fiscal Year 1987 (National Defense, 1986) directed the Secretary of Defense to establish, by regulation, the use of diagnosis related groups (DRGs) as the primary criteria for allocation of inpatient resources to MHSS facilities beginning on 1 October 1987 for inpatient services. In addition, the Act directed that a similar classification be implemented for outpatient services beginning 1 October 1988. In response to this legislation the Office of the Assistant Secretary of Defense (Health Affairs) submitted an implementation plan to Congress which requested that Congress support a phased implementation beginning FY 1989 (Report to Congress, 1987).

Although the study authors recommended that the three digit HCU not replace the two digit HCU as currently designed, the final report made several alternative recommendations in view of



the above legislation. Specific recommendations made in reference to ambulatory workload measurement included the following:

(1) The outpatient portion of the three digit HCU should be utilized to provide the weighted classification of ambulatory care compatible with a DRG based weighted index for inpatient care. To achieve this compatibility the report further recommended that the outpatient portion of the HCU be recalibrated and expanded using the latest available MEPRS data to incorporate present and projected changes in MEPRS cost stepdown methodology and subaccount classification.

(2) Current ambulatory diagnosis/procedure based research should be accelerated to enable the development and evaluation of a diagnosis/procedure based weighted index for ambulatory care as a potential replacement to the outpatient three digit HCU workload measurement system.

(3) A workload system consisting of DRG based inpatient weights and HCU outpatient weights should be used when developing a facility and appropriation specific resource allocation model for MHSS.

This report presents the recalibration and expansion of the outpatient portion of the three digit HCU. Recalibration was considered necessary for four reasons. First, recalibration allowed for the utilization of the most recently available MEPRS

data. Second, recalibration would enable expansion to subaccounts previously not included, including both medical and dental subaccounts. Third, the ambulatory portion of the current HCU was derived using outpatient visits only. In MEPRS, total ambulatory visits to any final account consist of both outpatient and inpatient visits. Inpatient visits are counted when hospitalized patients are seen in ambulatory care clinics or when certain health professionals, other than the primary physician, make a visit to a hospitalized patient or a ward. Under MEPRS stepdown procedures at the time of the study, expenses associated with those inpatient visits, except clinician salaries, were prorated back to the appropriate inpatient account during post-stepdown purification of final operating expense accounts (Medical Expense, 1986). Proration of expenses was based on the percentage of workload (visits) provided to each work center. System changes were anticipated which would modify the MEPRS stepdown procedure and eliminate this proration of inpatient ambulatory visit expense from ambulatory to inpatient accounts. The methodology used in this final report to recalibrate the ambulatory portion of the three digit HCU reallocated the expenses associated with inpatient visits back to the appropriate ambulatory account. In addition, the disposition cost was adjusted for this inpatient visit expense transferred from inpatient to ambulatory accounts. In contrast to the ambulatory portion of the three digit HCU, recalibration was based on total

ambulatory visits rather than only outpatient visits. Finally, and most important, recalibration would result in an ambulatory workload measure more compatible with the DRG based inpatient work unit currently under development.

Recalibration and expansion resulted in an ambulatory workload index that significantly differed from ambulatory workload measures to date, including the outpatient component of the current HCU. To clearly differentiate this measure from previous indices, it has been renamed the MHSS Ambulatory Work Unit (AWU).

b. Organization of Report. This study on the AWU is divided into several chapters. The report summary provides a short presentation of study background, results, conclusions, and recommendations. A listing of the AWU weights is also included in the report summary. Chapter one provides an introduction and rationale for the study. Chapter two presents the methodology used to derive the AWU. Chapter three provides study results to include a presentation of the impact of using the AWU to measure ambulatory workload output within the MHSS. Chapter three also provides a detailed analysis of both the stability and validity of the AWU. The validity of the AWU was assessed by examining the relationship between AWU based ambulatory resource intensity and DRG based inpatient case complexity in matched medical specialties. Chapter four presents the study conclusions and recommendations. To facilitate reading, all figures and tables are located immediately following the chapter in which they are

first referenced or in an appendix. There are five appendices included in this report. Appendix A summarizes the statistical algorithms used in this report. A detailed presentation of all AWU weights is provided in Appendix B. Appendix C presents MHSS medical treatment facility (MTF) AWU production for FY 1985 by service branch. Plots of medical specialty AWU resource intensity by DRG case complexity are presented in Appendix D. These plots support the analysis of the validity of the AWU. In Appendix E the derivation of all ambulatory cost factors is presented, including actual AWU calculation by clinic subaccount. Finally, in Appendix F is the computer code used to derive the AWU cost parameters and factors when using the basic decision tree logic.

## CHAPTER 2. METHODOLOGY

a. Data Base Procedures. To derive ambulatory workload cost parameters and AWU factors the most recently updated, tri-service, worldwide, FY 1984, FY 1985 and FY 1986, MEPRS PCOM data files as provided by the three services were used. In addition, it was necessary to also utilize FY 1985 and FY 1986 MEPRS Expense Assignment System (EAS) data. Once received, no facility data were altered and no facility subaccount data were eliminated prior to data screens. Extensive data reformatting was required to allow the subaccount data to be examined statistically. Statistical analysis was conducted using SAS, Version 5 System Software (SAS Institute, Inc., 1985a, 1985b). The following programming steps were accomplished prior to subaccount cost parameter analysis:

- (1) The MEPRS PCOM data files contained multiple types of records for each MTF reporting data. These record types included six header records (PCOM Record Type 11 - 16), and data records for the MEPRS subaccounts reported by that facility (PCOM Record Type 20). Selected data were read from the header records (e.g., MTF name), added to the data records and the data records were written to a new data base. Data records that were not fourth quarter cumulative records were eliminated from the data base. Since cost pools were assigned to final operating accounts during final

stepdown, subaccount cost pools were eliminated from the data base.

(2) On the Record Type 20 data records the following data fields were compacted and alphanumerically signed:

(a) support expense, (b) direct expense, (c) ancillary expense, and (d) purified expense. These data fields were uncompactd and arithmetically signed to enable statistical computation. Total expense was computed for use in cost factor estimation.

(3) A number of facilities utilized the fourth digit in subaccount codes (e.g., BABA, BABB, etc.) Costs and workload associated with fourth digit specified subaccounts were aggregated to the third digit subaccount level for all subaccounts within all facilities.

b. Ambulatory Cost Factor Calculation. With the exceptions outlined below, the following methodology was used to calculate cost factors for each ambulatory three digit subaccount, including dental care. This methodology was also used with those ambulatory summary accounts which had no subaccount. First, total cost was adjusted to reflect the reallocation of inpatient expenses associated with inpatient visits back to ambulatory subaccounts. Reallocation was conducted using the methodology that is described in Chapter 2 c. Following reallocation, facility subaccounts were subjected to initial record screens. Facility subaccounts failed the initial record screen if

subaccount total visits or expenses equaled 0. Following record screens, facility ambulatory subaccounts were subjected to initial distribution screens. Cost per total visit was calculated, transformed to the natural logarithm, and standardized to a mean equal 0, and standard deviation equal 1 (Appendix A). Facility ambulatory subaccounts failed the distribution screen if the standardized score of the log transformed cost per total visit was greater than +2.0 or less than -2.0 standard deviations from the mean of the logged data. The probability of cost per total visit being greater than + or - 2.0 standard deviations in clinics which had a large N size ( $N = 120$  or greater) was 4.5%. In clinics with medium N sizes ( $N = 60$ ) the probability was 5.0% and in clinics which had small N sizes ( $N = 20$ ) the probability increased to 6.2%.

Total visit cost factors were calculated based on facility subaccounts which passed the above screens. One of four possible location parameters--arithmetic mean, geometric mean, square transformed mean, or median cost per total visit--was selected as the cost factor. Parameter selection was based on appropriate decision criteria. Discussions of actual statistical tests are included in Appendix A. These criteria are depicted in Figure 1 (p. 19) and are as follows:

- (1) For each ambulatory subaccount, the cost per total visit distribution coefficient of skewness was calculated.

If the coefficient of skewness was positive or negative and

had a probability value greater than .01 (nonsignificant skewness), the arithmetic mean was used as the cost factor.

(2) If the coefficient of skewness was positive and had a probability value less than .01 (significant positive skewness), the ambulatory subaccount data were log transformed and skewness was then computed for the log transformed distribution. If the coefficient of skewness now had a probability value greater than .01, the geometric mean was calculated and used as the cost factor. If the skewness probability value remained below .01, the median was calculated and used as the cost factor.

(3) If the coefficient of skewness was negative and had a probability value less than .01 (significant negative skewness) the subaccount data were square transformed and the arithmetic mean of the transformed distribution was calculated and used as the cost factor.

For several ambulatory subaccounts it was necessary to deviate from the above methodology:

(1) Subaccount BAQ - Infectious Disease, did not have cost or workload data in FY 1985 MEPRS data and FY 1986 data was incomplete (see Table B-1, p. B-2). This subaccount was assigned cost factors for BAA - Internal Medicine.

(2) Subaccount BAZ - Medical Clinics Not Elsewhere Classified (NEC), FY 1985 MEPRS workload and cost data were very unstable with regard to variance exhibited in cost



per total visit. This subaccount was assigned the cost factor for BAA - Internal Medicine.

(3) Subaccount BBZ - Surgical Clinics NEC, FY 1985 MEPRS workload and cost data were absent. This subaccount was assigned the cost factor for BBA - General Surgery.

(4) Subaccount BDZ - Pediatric Clinics NEC, FY 1985 MEPRS workload and cost data were also very unstable. This subaccount was assigned the cost factor for BDA - Pediatric.

(5) Subaccount DHE - Social Work Services, cost and workload data were used to calculate the cost factor for BFE - Social Work.

(6) Subaccount FAE - Alcohol and Drug Abuse/ Rehabilitation Program, incremental ambulatory costs could not be isolated because there was no separation of the inpatient and ambulatory workload cost in special program subaccounts at the time of the study. This subaccount was assigned the cost, location parameter, and AWU weight for BFD - Mental Health.

(7) Subaccount FBA - Community Health. When subaccount cost factor calculation was attempted it was determined that although almost all MHSS MTFs reported costs in subaccount FBA - Community Health, only ten MTFs reported workload in this subaccount in the MEPRS PCOM files. Subsequently, by an analysis of Statistical Assignment Statistics (SAS) contained in MEPRS EAS files, it was

determined that although facilities did not report FBA - Community Health visits in MEPRS PCOM files, facilities included this workload in EAS files. FBA - Community Health visits were extracted from FY 1985 Army EAS files and merged with FY 1985 Army PCOM FBA - Community Health subaccount cost data and the subaccount cost factor was derived. The cost was based on Army facilities only because Army EAS files were most readily available during the study period.

(8) Subaccount FBG - Occupational Health. When subaccount cost factor calculation was attempted it was determined that no facilities recorded separately identifiable FBG - Occupational Health visits until FY 1986. When examining FY 1986 MEPRS data a similar situation existed to FBA - Community Health; although many MHSS MTFs reported costs in subaccount FBG - Occupational Health in the MEPRS PCOM files, very few MTFs reported workload in this subaccount. By analysis of SASS contained in MEPRS EAS files, it was determined that although facilities did not report FBG - Occupational Health visits in MEPRS PCOM files, facilities included this workload in EAS files. The FBG - Occupational Health visits were extracted from FY 1986 Army EAS files and merged with FY 1986 Army PCOM FBG - Occupational Health subaccount cost data and the subaccount cost factor was derived. Fiscal Year 1986 costs were discounted to FY 1985 using the procedure outlined in

Chapter 3 b. The cost was based on Army facilities only because Army EAS files were most readily available.

c. Ambulatory Work Unit Calculation. In FY 1985, total inpatient (functional category A) MEPRS costs were \$1,836,728,335 and total ambulatory (functional category B) costs were \$1,982,511,342 (N = 213 MTFs). Of total ambulatory costs, \$1,890,948,265 were determined to be non-clinician costs. For each ambulatory subaccount the ambulatory inpatient and outpatient visits were determined and total ambulatory visits were computed. Secondly, the subaccount total non-clinician expense was calculated. Following computation of non-clinician expenses, inpatient visit non-clinician expenses were reallocated back to each ambulatory subaccount using the following algorithm:

$$RE_i = E_i / (1 - IV_i / TV_i)$$

where:  $RE_i$  = Revised total non-clinician expense in MEPRS subaccount work center<sub>i</sub>.

$E_i$  = Total non-clinician expense in MEPRS subaccount work center<sub>i</sub>.

$IV_i$  = Inpatient visits in MEPRS subaccount work center<sub>i</sub>.

$TV_i$  = Total visits in MEPRS subaccount work center<sub>i</sub>.

$i$  = (e.g., BAA, BAB, BAC, etc.)

In FY 1985, using the above algorithm it was determined that \$76,875,320 in ambulatory inpatient visit non-clinician expense had been prorated back to inpatient subaccounts. Reallocating

this total back to ambulatory subaccounts resulted in an adjusted total inpatient cost of \$1,759,853,015. In FY 1985 there were 956,220 dispositions. Thus, the FY 1985 unadjusted average disposition cost was \$1,920.8219 and the adjusted average disposition cost was \$1,840.4269. This adjusted disposition cost was used to derive AWU relative cost weights from the ambulatory cost factors by dividing each cost factor by the adjusted average disposition cost.

d. Ambulatory Work Unit Stability. To examine the stability of AWU weights over time, AWU weights were also derived for FY 1984. The purpose of this derivation was, (1) to determine what extent the AWU as an overall scale significantly changed over time, and (2) to identify if any specific AWU weights demonstrated sufficient variance to require adjustment.

The methodology used to derive FY 1984 AWU weights was identical to the methodology used to derive FY 1985 AWU weights. In FY 1984, it was determined that \$66,826,289 in ambulatory inpatient visit non-clinician expense had been prorated back to inpatient subaccounts. Reallocating this total back to ambulatory subaccounts resulted in an adjusted total inpatient cost of \$1,533,546,837 (N = 214 MTFs). In FY 1984 there were 966,851 dispositions which resulted in an adjusted average disposition cost of \$1,586.1253. This adjusted disposition cost was used to derive AWU weights from the FY 1984 ambulatory cost factors. Following FY 1984 weight derivation an analysis of both

overall scale and individual weight stability was completed. The results of this analysis are presented in Chapter 3.

e. Validity of the AWU as a Measure of Ambulatory Workload Resource Intensity. To evaluate AWU based resource intensity as a measure of ambulatory workload case complexity or severity, the criterion-related validity of the AWU was examined using DRG based case complexity (Kerlinger, 1986). Specifically, the extent that the AWU demonstrated similar scalar relationships with DRG based case complexity was examined in detail. The results of this analysis are presented in Chapter 3.

Prior to analysis, it was necessary to recode several inpatient record abstract data elements to permit accurate DRG assignment and analysis. In FY 1985, MHSS inpatient diagnosis data were coded using International Classification of Disease, 9th Revision (ICD-9) and procedure data were coded using International Classification of Procedures in Medicine (ICPM). The classification scheme for grouping diagnoses and procedures into DRGs was the International Classification of Diseases, 9th Revision with Clinical Modification (ICD-9-CM). Prior to DRG computation, ICD-9 and ICPM data were converted to ICD-9-CM (see Baker, et al., 1987, for a detailed discussion of the methodology and reliability of data conversion). The Version 4.0 Grouper (Federal Register, 1986) was used for DRG computation which assigned data to 472 mutually exclusive DRGs. Diagnosis Related Group 438 had not been used since the Version 2.0 Grouper was

released in September 1985. Because of code limitations in MHSS FY 1985 ICD-9/ICPM data, records could not be assigned for several DRGs to include: (1) 27-Traumatic Stupor + Coma, Coma >1 Hr., (2) 50-Sialoadenectomy, (3) 210-Hip + Femur Procedures, Except Major Joint Age >69 and/or Complication or Comorbidity (CC), (4) 211-Hip + Femur Procedures Except Major Joint Age 18-69 and/or CC, (5) 212-Hip + Femur Procedures Except Major Joint Age 0-17, and (6) 230-Local Excision + Removal of Internal Fixture Devices of Hip + Femur. Inpatient disposition weights used to derive case complexity were the 1987 Health Care Financing Administration (HCFA) relative weights (Federal Register, 1986).

It was necessary to recode several additional data elements prior to DRG computation to include the following:

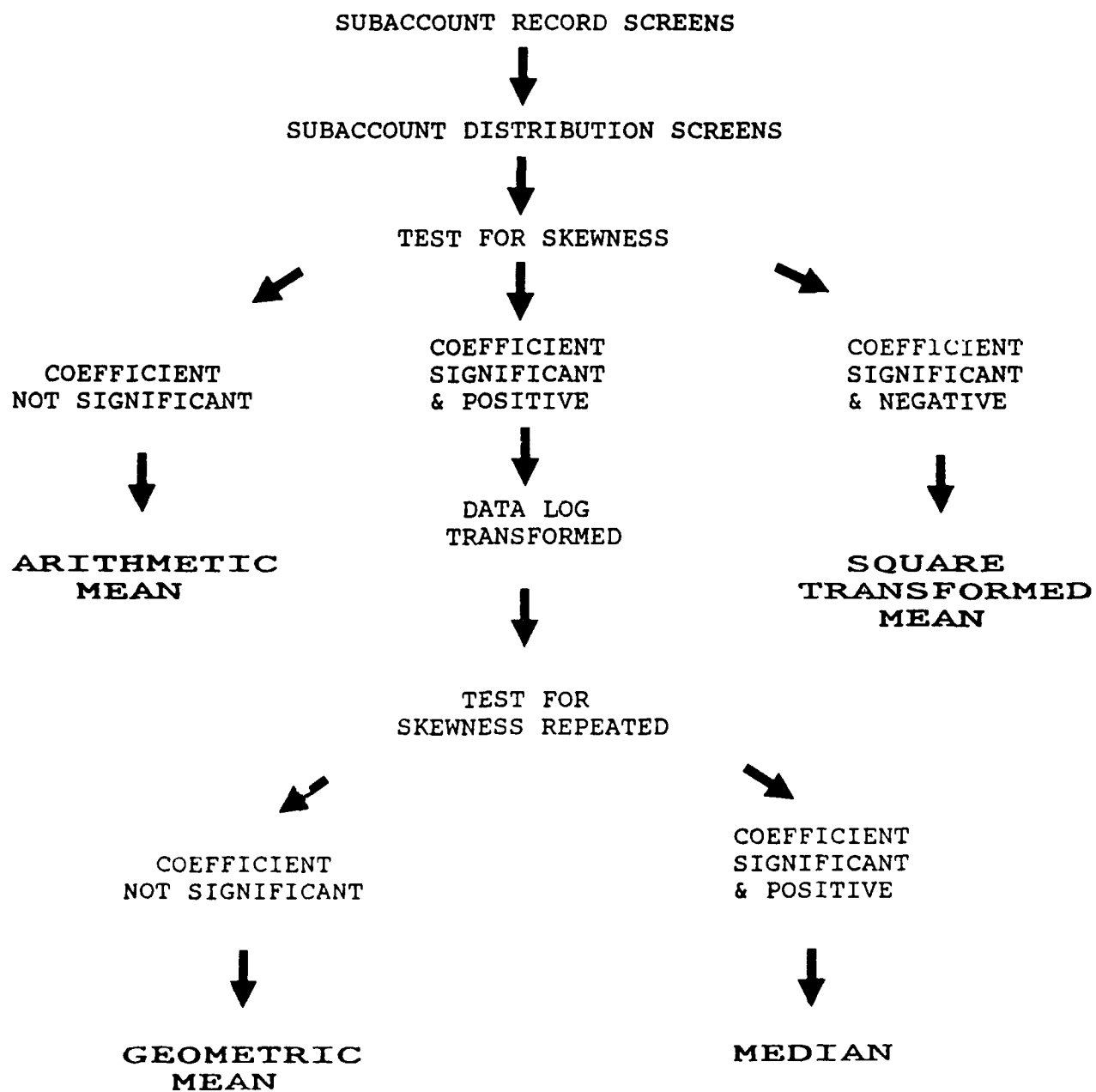
(1) Navy disposition codes with 11, 12, and 30 were recoded to disposition code 01.

(2) Air Force newborn age codes were recoded to 00.

(3) Navy and Air Force diagnosis codes were "zero" filled at the 5th position making them incompatible with ICD-9-CM diagnosis tables used by the Grouper and 5th digit zeros were deleted prior to DRG processing.

(4) Navy and Air Force procedure codes were "zero" filled at the 4th position making them incompatible with ICD-9-CM procedure tables used by the Grouper and 4th digit zeros were deleted prior to DRG processing.

FIGURE 1  
DECISION TREE  
FOR AMBULATORY LOCATION PARAMETER SELECTION



### CHAPTER 3. RESULTS

a. Stability of AWU from FY 1984 to FY 1985. Analysis was conducted using computed ambulatory weights only. Accounts where weight assignment was based on other criteria (BAQ, BAZ, BBJ, BBZ, BDZ, and FAE) and subaccounts without two years of data (FBA and FBG) were eliminated prior to analysis. In addition, dental weights were also eliminated. A plot of FY 1985 AWU weights by FY 1984 AWU weights is included in Figure 2 (p. 36). The correlation between FY 1984 AWU weights and FY 1985 weights was positive and extremely high ( $r = .947$ ,  $N = 50$ ) indicating very high overall scale stability. Secondly, a paired t-test was performed to test the hypothesis that there was no overall change from FY 1984 AWU weights to FY 1985 AWU weights. The paired t-test of the mean percent weight change was nonsignificant ( $t = -0.45$ ,  $DF = 49$ ,  $Prob. = 0.6574$ ) which indicated that there was no overall significant change from FY 1984 AWU weights to FY 1985 AWU weights.

A detailed analysis of change exhibited by individual weights was then performed. The percent change exhibited by each weight from FY 1984 to FY 1985 was standardized to a mean = 0 and standard deviation = 1 (Appendix A). When distribution analysis of the standardized change scores was conducted, the majority of weights clustered within -1.0 to +1.0 standard deviations which indicated that this level was an appropriate stability cut-off



level. Ten weights demonstrated standardized change scores greater than +1.0 standard deviations or less than -1.0 standard deviations. These weights are presented in Table 1 (p. 38). With the exception of BFD - Mental Health weights, weights which showed higher variance from FY 1984 to FY 1985 were subaccounts with very small N sizes. Those weights which demonstrated standardized change scores greater than +1.0 standard deviations or less than -1.0 standard deviations were then adjusted for variance.

b. Ambulatory Work Unit Variance Adjustment. In FY 1984 there were 44,636,055 ambulatory visits. Following reallocation of inpatient visit non-clinician costs to ambulatory care, FY 1984 total ambulatory costs were \$1,766,027,414, or \$39.57 per visit. In FY 1985 cost per visit was \$46.52, an increase of 17.56% from FY 1984. In FY 1986 there were 42,285,109 ambulatory visits. Following reallocation of inpatient visit non-clinician costs to ambulatory care, FY 1986 total ambulatory costs were \$2,264,935,099, or \$53.56 per visit, an increase of 15.14% from FY 1985. For discounting FY 1986 costs to FY 1985 a discount factor of .8685 ( $1 / 1.1514$ ) was used. For the ambulatory accounts adjusted for variance, FY 1984 and FY 1985 workload and costs were combined after inflating FY 1984 ambulatory costs by 17.56%. Following inflation, AWU factors were computed from the combined data in the identical manner as the other clinic subaccounts.

c. Ambulatory Work Unit Final Weights. The actual derivation of cost factors and AWU weights for each subaccount is included in Appendix E. The AWU weights computed using the ambulatory methodology described in Chapters 2 b., 2 c., and 3 b. are summarized in Tables B-1 through B-11 (pp. B-2 to B-12) of Appendix B. Included are the following data:

(1) For each three digit subaccount the ambulatory cost factors are included. The location parameter used as each cost factor is also presented. Once again, AWU factors were derived by dividing the ambulatory cost factors by a worldwide, all facility, FY 1985, adjusted average disposition cost of \$1,840.4269. The AWU factors that resulted from these costs were computed and are included. In the current two digit HCU, outpatient HCU factors were computed to the third digit. It was felt this level was a significant loss of precision in view of the number of visits accumulated in the high volume ambulatory subaccounts. Consequently, AWUs were computed to the fourth digit in this report.

(2) The number of facilities (N) from which visit costs and AWU factors were derived are identified. Initial N size was the number of facilities having any type of data in the subaccount. Final N size was the number of facilities used to actually calculate cost factors and AWU weights. The

difference was the number of facilities eliminated due to record and distribution screens.

(3) For each subaccount a resource intensity index (RII) was derived. Subaccount RII was derived by first computing the mean AWU weight for all subaccounts, excluding dental care. The mean AWU weight was computed as .0312966 (N = 58). Each subaccount AWU weight was divided by this mean AWU weight, including dental care subaccounts. These computations standardized the AWU weights to 1.0.

Subaccount ambulatory location parameter costs and the AWU weights derived from these costs demonstrated substantial variation between subaccounts. Within the summary account BA - Medical Care, three digit subaccount AWU weights ranged from a low of .0083 in Allergy to a high of .0629 in Nephrology, a range of over 758%. Within BB - Surgical Care, three digit subaccount AWU weights ranged from .0234 in Proctology to .0723 in Organ Transplant, a range of over 308%. Clinics have been ranked by AWU RII in Table 2 (p. 39) with quartile ranking identified (dental subaccounts were excluded when calculating quartiles). For example, the highest resource intensity of all clinics is Organ Transplant with a RII of over 131% greater than the average RII of 1.0. One Nephrology visit is 3.14 times as resource intensive as one pediatric visit and would receive 3.14 times the workload credit using the appropriate AWU factors.

d. Military Health Service System Two and Three Digit Outpatient HCU Production Compared to AWU Production. Tables 3 and 4 (pp. 40 and 41) contain workload credit shifts by MEPRS summary account in FY 1985. Table 3 presents workload credit shifts when using the AWU rather than the outpatient two digit HCU. Included for each summary account are the total ambulatory visits generated within that account. Secondly, the total two digit HCUs and total AWUs generated within that account are also identified. Finally, the percentage change in total credit when using the AWU rather than the two digit HCU is also included.

The AWU provided substantially greater credit to ambulatory care than the two digit HCU. Particularly large increases were seen in medical (+57.6%), surgical (+27.4%), psychiatric (+52.7%), and family practice (+27.7%). Overall, without any additional "artificial" ambulatory treatment incentive weighting, the AWU provided 23.5% greater credit for ambulatory services than the two digit HCU.

Table 4 presents similar data as Table 3, but compares AWU production with the outpatient three digit HCU. Again, the AWU provides substantially greater credit to ambulatory workload than the outpatient three digit HCU (+11.3% overall) with large increases seen in medical (+23.3%), surgical (+13.9%), psychiatric (+33.7%), and orthopedic (+16.9%) clinics.

The increased ambulatory emphasis of the AWU when compared to the three digit outpatient HCU was the result of four factors:

(1) Modifications were implemented in weight derivation to include adjustments for clinics which demonstrated weight variance over time (e.g., Organ Transplant) and weight assignment policy for certain clinics (e.g., BAZ, BBZ, FBG, etc.). In addition, there was the change in output that may occur when using more recent data.

(2) Total ambulatory visits rather than just outpatient visits were used in the computation of AWU output.

(3) The mean disposition cost used to convert the cost factor into a weight was adjusted downward to reflect reallocation of inpatient visit costs to ambulatory clinics.

(4) The decision tree used to calculate cost factors was conservative with regard to transformation of the arithmetic mean cost factor. A skewness probability value of .01 or less was the criteria for computing the geometric mean rather than a skewness probability value of .05.

The relative importance of each of these four factors was determined. Excluding dental care, the AWU resulted in 126,294 more AWUs than the three digit outpatient HCU, or an 11.81% overall increase in total output. By implementing the changes in weight derivation and assignment discussed in the first chapter, and using FY 1985 data, the AWU increased total output by 19,984 AWUs, or a 1.87% increase in total output. This incremental increase represented 15.83% of the overall increase of 11.81%.

By including inpatient visits, an additional 41,631 AWUs were generated, or a 3.39% increase. This incremental increase represented 32.94% of the overall increase. By adjusting the disposition cost downward to reflect reallocation of inpatient visit costs to ambulatory clinics an additional 50,246 AWUs were added, or a 4.70% increase. This incremental increase represented 39.80% of the overall increase. Finally, making the decision tree conservative by use of the geometric mean added an additional 14,433 AWUs, or a 1.35% increase. This incremental increase represented 11.43% of the overall increase of 11.81%.

e. Military Health Service System MTF AWU Production. In Appendix C, Tables C-1 to C-6 (pp. C-2 to C-20) are presented which display total AWU output by facility. Tables are presented by branch of service. Separate tables are included for dental AWU production. Facilities are ranked by facility RII. Facility RII was computed using a method similar to Chapter 3 c. This method was followed for both medical and dental facilities.

(1) For each facility total AWUs were divided by total ambulatory visits to determine AWUs per ambulatory visit produced by that facility.

(2) Facility AWUs per ambulatory visit were summed across all MHSS facilities and divided by the total number of facilities to calculate the overall MHSS AWUs per ambulatory visit mean.

(3) Each facility AWUs per ambulatory visit mean was divided by the overall MHSS AWUs per ambulatory visit mean. The result was a facility RII standardized to 1.0.

Each branch of service demonstrated a substantial range from lowest to highest facility AWU RII. In Army facilities, the facility AWU RII ranged from .9278 to 1.1006 (.1728 range). In Navy facilities, facility AWU RII ranged from .8825 to 1.1168 (.2343 range). A similar range in facility AWU RII was also demonstrated by Air Force facilities, where facility AWU RII ranged from .8499 to 1.0718 (.2219 range). Similar ranges were also seen when facility dental AWU RII was examined.

f. Validity of the AWU as a Measure of Ambulatory Workload Resource Intensity. The extent that AWU RII demonstrated similar scalar relationships with a DRG based case complexity index (CCI) was examined in detail. This analysis was conducted at the subaccount work center level and was restricted to those medical specialty subaccounts which had a direct inpatient to outpatient match. The following model was examined:

$$Y = B_0 + B_1X + E$$

where: Y = Matched subaccount work center  
AWU RII.

X = Matched subaccount work center  
mean DRG CCI.

$B_0$  = Intercept.

$B_1$  = Slope.

E = Error.

Subaccount mean DRG CCI was calculated in the following manner:

(1) Diagnosis Related Groups were calculated for FY 1985 biometrics data and were assigned relative weights using the methodology described in Chapter 2.

(2) Skewness was then computed for both the overall MHSS relative weight distribution as well as for individual subaccount distributions. In all instances distributions demonstrated statistically significant positive skewness. Consequently, the geometric mean was used for both the overall mean and the subaccount means.

(3) The DRG HCFA weights were log transformed and summed across all patient records and divided by the total number of patient records. The geometric mean was then computed to produce an overall MHSS DRG HCFA relative weight geometric mean.

(4) The DRG HCFA relative weight geometric means were calculated for each inpatient subaccount and each subaccount DRG HCFA weight geometric mean was then divided by the overall MHSS DRG HCFA relative weight geometric mean to produce a subaccount geometric mean DRG CCI standardized to 1.0.

Following computation of subaccount geometric mean DRG CCI, these inpatient subaccounts were matched to their corresponding outpatient subaccounts. Only those outpatient subaccounts with a corresponding inpatient subaccount were used to examine the



relationships between subaccount AWU RII and mean DRG CCI. Table 5 presents the subaccounts that were used in the analysis of AWU validity (p. 42). For each subaccount, the MEPRS subaccount code is listed for both inpatient and ambulatory care. For each service branch, the HCFA geometric mean weight is presented for each matched inpatient medical speciality subaccount. Secondly, subaccount mean DRG CCI which resulted from standardization is also presented. Data from the three service branches were combined and HCFA geometric mean weights and DRG CCI are included for the entire MHSS. In addition, the AWU weight and AWU RII for each subaccount are also included. Computation of the AWU RII is discussed in Chapter 3 c. Specific analysis regarding service branch differences in medical specialty DRG geometric means was considered beyond the scope of this report. It should be noted, however, that Army biometric coding conventions in place at the time of the study differed from the other two service branches regarding biometric disposition assignment code. The Army used a unique two digit clinic service code not directly compatible with the MEPRS clinic service codes used by the Navy and Air force. Consequently, prior to analysis, the Army codes were "mapped" to equivalent MEPRS codes using the map presented in Figure 3 (p. 37). Some Air Force biometric data included multiple MEPRS clinic service codes with bed days for each clinic service code. When this situation was encountered, the clinic service with the most days was selected as the MEPRS code. It is

possible that some of the differences in specialty mean case complexity seen between service branches could have been influenced by this required mapping.

Data limitations required that several decisions be made prior to analysis. First, when computing subaccount DRG relative weight means and CCI, it was determined that USAF facilities did not report any biometric dispositions in subaccount FAE - Alcohol/Drug Abuse Rehabilitation. Consequently, data was not available in this subaccount and relationship between USAF subaccount AWU RII and mean DRG CCI was examined without this subaccount. Secondly, although the subaccounts AAZ - Medical Care Not Elsewhere Classified (NEC) and ABZ - Surgical Care NEC did contain biometric dispositions convertible to DRGs, they were eliminated prior to any analysis. First, not all service branches had biometric dispositions in these subaccounts. In addition, the ambulatory subaccounts, BAZ - Medical Clinics NEC and BBZ - Surgical Clinics NEC, which matched these subaccounts, were assigned the AWU weights for BAA - Internal Medicine and BBA - General Surgery respectively, due to unstable or missing ambulatory data. Finally, the AWU was calculated based on both hospitals and clinics. Restricting the analysis to matched medical specialty subaccounts confined this part of the analysis to hospitals. During initial analysis of the data one notable exception became apparent. The AWU weight for subaccount BEF - Podiatry Clinic was based in large part on non-hospital based

clinics. In addition, in a number of those inpatient facilities having an ambulatory podiatry clinic accumulating workload, there was no inpatient podiatry service; rather, when patients were hospitalized the workload and costs were accumulated under subaccount AEA - Orthopedics. Consequently, inpatient biometrics workload listed under AEB - Podiatry was combined with AEA - Orthopedics and the DRG weight and CCI means were based on this combination. Subaccount AEA - Orthopedics was then matched to BEA - Orthopedic Clinic.

In Table 6 are descriptive statistics for both subaccount AWU RII and mean DRG CCI (p. 43). The distribution of the subaccount DRG CCI means deviated from normality sufficient to violate the normality assumptions necessary to use parametric statistics of association. Upon graphical analysis of the data it became apparent that Cardiovascular Surgery was an obvious outlier (see Figures D-1, D-3, D-5, and D-7). Cardiovascular Surgery AWU RII was less than what would have been anticipated from the corresponding inpatient DRG CCI. This relationship persisted whether FY 1985 data were used to calculate the AWU factor or when FY 1985 data were combined with FY 1984 data. Elimination of Cardiovascular Surgery resulted in non-significant DRG CCI skewness and kurtosis.

The correlation between subaccount AWU RII and mean DRG CCI was conducted and is included in Table 7 (p. 44). When Cardiovascular Surgery was included, Spearman's non-parametric

correlation was used and when this subaccount was excluded Pearson's correlation was used. In either case, the correlation between subaccount AWU RII and mean DRG CCI was positive, moderately high ( $R = .612$  to  $.741$ ), and statistically significant ( $\text{Prob.} < .001$ ) for all three service branches separately and when combined into an overall MHSS correlation. Excluding Cardiovascular Surgery served to substantially increase the correlation between subaccount AWU RII and mean DRG CCI.

Regression analysis was conducted after excluding Cardiovascular Surgery to evaluate the extent that subaccount mean DRG CCI would predict AWU RII (Table 8, p. 45). As expected, the regression equations explained a moderately high amount of variance in AWU CCI ( $R^2 = .347$  to  $.528$ ) and were statistically significant ( $\text{Prob.} < .002$ ). This relationship was seen when analyzing the three service branches separately and when combined into an overall MHSS equation. Plots have been included for each branch of service and MHSS that graphically present the regression relationships discussed above (see Figures D-2, D-4, D-6, pp. D-3, D-5, D-7). Each plot contains the regression line and equation for that branch of service.

Regression residual analysis was then conducted to determine the adequacy of the regression model to explain data relationships. All subaccounts were coded as to whether the subaccount was a surgical or medical specialty. Contingency table analysis was conducted between the sign of the subaccount

residual and whether that subaccount was a medical or surgical specialty. Either the chi-square or Fisher exact test of significance was used to test for regression model bias. A significant test indicated that the regression equation was biased with regard to whether the subaccount was a medical or surgical specialty. Contingency table analysis is presented in Table 9 (p. 46). Results indicated that the regression model demonstrated significant bias (Prob. < .10) as to whether the subaccount was a medical or surgical specialty. This bias was seen in Navy and Air Force service branches as well as when combined into overall MHSS. In these service branches and overall MHSS, the regression model over-estimated medical subaccounts and under-estimated surgical subaccounts. These results strongly suggested that two quantitatively separate, predictive relationships were present; one relationship for medical specialties and a second for surgical specialties. To test this assumption the following alternative model was tested:

$$Y = B_0 + B_1X + B_2Z + B_3XZ$$

where: Y = Matched subaccount work center AWU RII.

X = Matched subaccount work center  
mean DRG CCI.

$B_0, B_2$  = Intercept terms.

$B_1, B_3$  = Slope terms.

Z = 1 if subaccount is a surgical service.  
0 if subaccount is a medical service.

E = Error.

Results are presented in Table 10 (p. 47). By expanding the model, the variance explained in subaccount AWU RII by mean DRG CCI increased substantially, from 51.3% to 64.2%. The final model was enumerated using stepwise regression. All coefficients in the model were statistically significant and entered the model with the exception of  $B_3$ . Since the  $B_2$  coefficient was statistically significant two models resulted for the two values of Z:

If  $Z = 0$ : Subaccount is a medical specialty.

$$\begin{array}{lcl} \text{Med. Service} & = & -.6170 + (1.3215 * \text{Med. Service} \\ \text{AWU RII} & & \text{Subaccount Mean DRG CCI}) \end{array}$$

If  $Z = 1$ : Subaccount is a surgical specialty.

$$\begin{array}{lcl} \text{Surg. Service} & = & -.3322 + (1.3215 * \text{Surg. Service} \\ \text{AWU RII} & & \text{Subaccount Mean DRG CCI}) \end{array}$$

Figure D-8 (p. D-9) presents these relationships graphically. This plot contains the regression line and equation for medical service subaccounts and surgical subaccounts separately.

The model results indicated that specialty subaccount mean DRG CCI demonstrated a strong predictive, positive relationship for AWU RII. Further, this relationship was quantitatively different, depending on whether the subaccount was a surgical or medical specialty. The model predicted that for the mean level of inpatient subaccount case complexity (1.276), the resource intensity of the ambulatory equivalent of that inpatient subaccount was 26.64% higher when the ambulatory subaccount was a surgical specialty rather than a medical specialty. For example,

for a subaccount with a mean CCI of 1.3540, the model predicted that AWU RII would be 1.225 if the subaccount was a surgical subaccount and AWU RII would be 1.0692 if the subaccount was a medical service.

FIGURE 2  
FISCAL YEAR 1985 AWU WEIGHTS BY  
FISCAL YEAR 1984 AWU WEIGHTS

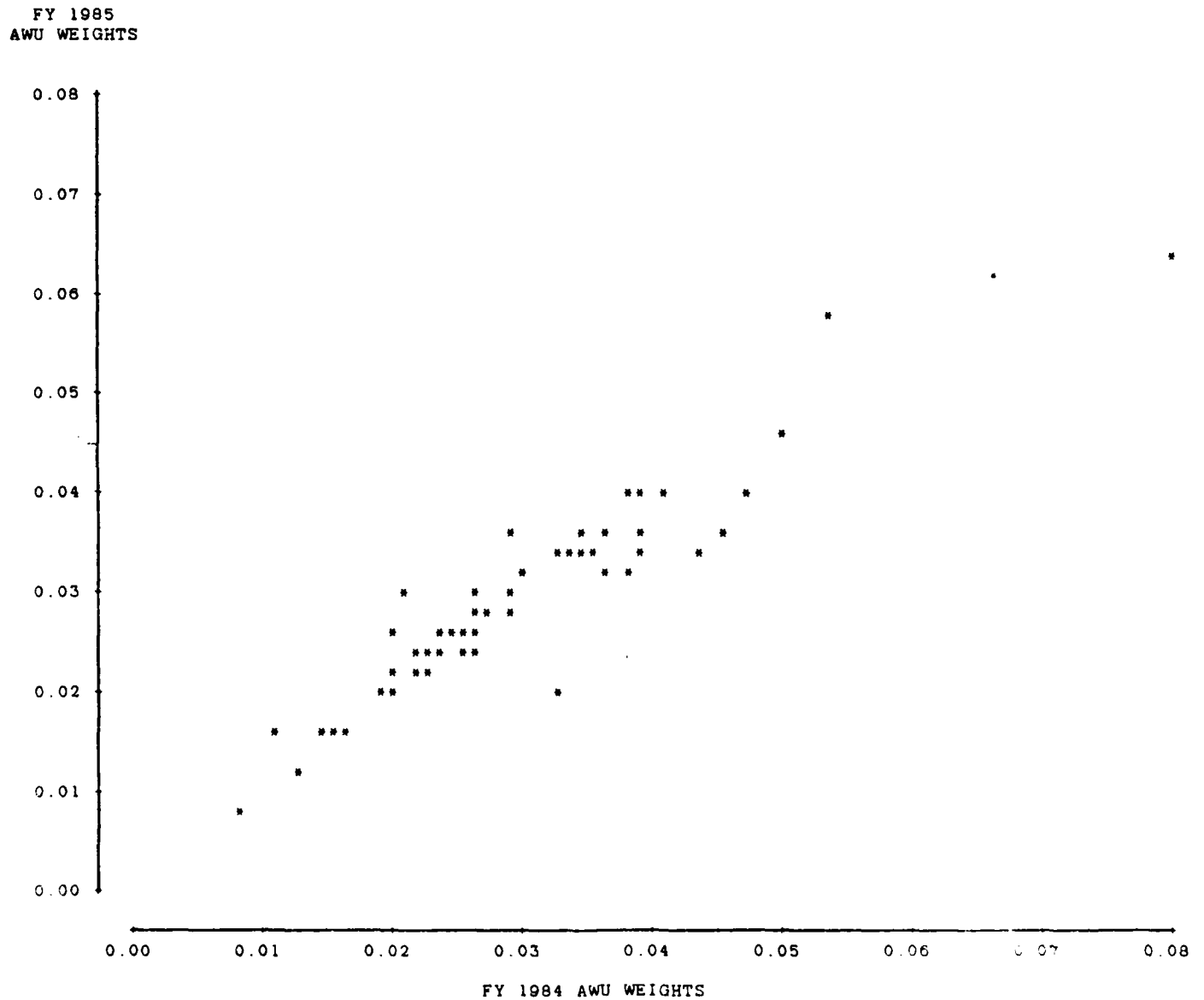




FIGURE 3

MAPPING PROCEDURE FOR  
ARMY INDIVIDUAL PATIENT DATA SYSTEM (IPDS)  
CLINIC SERVICE CODE TO MEPRS CLINIC SERVICE CODE

IPDS CODE	IPDS NAME	MEPRS CODE	MEPRS NAME
AA	INTERNAL MEDICINE - - - -		
AN	ALLERGY/IMMUNOLOGY - - - -		
AU	INFECTIOUS DISEASE - - - -	- - -> AAA	INTERNAL MEDICINE
EA	FAMILY PRACTICE/ MEDICAL - - - -		
AB	CARDIOLOGY - - - -	AAB	CARDIOLOGY
AD	DERMATOLOGY - - - -	AAD	DERMATOLOGY
AE	ENDOCRINOLOGY - - - -	AAE	ENDOCRINOLOGY
AF	GASTROENTEROLOGY - - - -	AAF	GASTROENTEROLOGY
AG	HEMATOLOGY - - - -	AAG	HEMATOLOGY
AI	NEPHROLOGY - - - -	AAI	NEPHROLOGY
AJ	NEUROLOGY - - - -	AAJ	NEUROLOGY
AK	ONCOLOGY - - - -	AAK	ONCOLOGY
AL	PULMONARY - - - -	AAL	PULMONARY
AM	RHEUMATOLOGY - - - -	AAM	RHEUMATOLOGY
BA	GENERAL SURGERY - - - -		
BJ	HAND SURGERY - - - -		
BK	HEAD AND NECK SURGERY - - - -	- - -> ABA	GENERAL SURGERY
EB	FAMILY PRACTICE/ SURGICAL - - - -		
BB	CV/THORACIC SURGERY - - - -		
BN	PERIPHERAL VASCULAR SURGERY - - - -	- - -> ABB	CV/THORACIC SURGERY
BD	NEUROSURGERY - - - -	ABD	NEUROSURGERY
HA	OPHTHALMOLOGY - - - -	ABE	OPHTHALMOLOGY
BE	ORAL SURGERY - - - -	ABF	ORAL SURGERY
HB	OTORHINOLARYNGOLOGY - - - -	ABG	OTORHINOLARYNGOLOGY
BF	PEDIATRIC SURGERY - - - -	ABH	PEDIATRIC SURGERY
BG	PLASTIC SURGERY - - - -	ABI	PLASTIC SURGERY
BH	PROCTOLOGY - - - -	ABJ	PROCTOLOGY
BI	UROLOGY - - - -	ABK	UROLOGY
BL	ORGAN TRANSPLANT - - - -		
BZ	INSTITUTE OF SURGICAL RESEARCH (BURN CENTER) - - - -	- - -> ABZ	SURGICAL CLINICS NEC
CA	GYNECOLOGY - - - -		
ED	FAMILY PRACTICE/ GYNECOLOGY - - - -	- - -> ACA	GYNECOLOGY
CB	OBSTETRICS - - - -		
EC	FAMILY PRACTICE/ OBSTETRICS - - - -	- - -> ACB	OBSTETRICS
DA	PEDIATRICS - - - -		
EF	FAMILY PRACTICE/ PEDIATRICS - - - -	- - -> ADA	PEDIATRICS
DC	ADOLESCENT PEDIATRICS - - - -		
DE	NURSERY (NEWBORN) - - - -	- - -> ADB	NURSERY
FA	ORTHOPEDICS - - - -		
EG	FAMILY PRACTICE/ ORTHOPEDICS - - - -	- - -> AEA	ORTHOPEDICS
FB	PODIATRY - - - -	- - -> AEB	PODIATRY
DA	PSYCHIATRY - - - -		
EH	FAMILY PRACTICE/ PSYCHIATRIC - - - -	- - -> AF	PSYCHIATRY
AT	OTHER (ALCOHOL REHABILITATION) - - - -	- - -> FAE	ALCOHOL AND DRUG ABUSE/ REHABILITATION

TABLE 1  
CLINIC AWU WEIGHTS DEMONSTRATING HIGHEST VARIANCE  
FROM FY 1984 TO FY 1985

ACCOUNT CODE NAME	N (FY 1985)	FY 1984 AWU WEIGHTS	FY 1985 AWU WEIGHTS	PERCENT CHANGE	STANDARDIZED CHANGE SCORE
BK UNDERSEAS MEDICINE	4	.0328	.0208	-57.69%	-3.8735
BED NEUROMUSCULOSKELETAL	12	.0109	.0161	+32.30%	+2.2669
BAE DIABETIC	12	.0208	.0304	+31.58%	+2.2179
BAN PULMONARY DISEASE	27	.0454	.0350	-29.71%	-1.9644
BAF ENDOCRINOLOGY	22	.0440	.0341	-29.03%	-1.9179
BEC HAND SURGERY	12	.0198	.0255	+22.35%	+1.5883
BBE ORGAN TRANSPLANT	2	.0796	.0643	-23.80%	-1.5605
BFD MENTAL HEALTH	109	.0287	.0351	+18.23%	+1.3073
BBB CV/THOR SURGERY	20	.0384	.0320	-20.00%	-1.3016
BAM ONCOLOGY	23	.0470	.0401	-17.21%	-1.1110

TABLE 2  
CLINIC RANKING BY AWU RII

CLINIC SPECIALTY	AWU RII	
ORGAN TRANSPLANT	2.3102	
NEPHROLOGY	2.0098	
NEUROSURGERY	1.8628	
PEDIATRIC SURGERY	1.5848	
ONCOLOGY	1.4890	
HEMATOLOGY	1.4538	
PULMONARY DISEASE	1.3101	
PLASTIC SURGERY	1.2973	QUARTILE 1
ENDOCRINOLOGY	1.2749	
UROLOGY	1.2685	
INTERNAL MEDICINE	1.2621	
INFECTIOUS DISEASE	1.2621	
MEDICAL CLINICS NEC	1.2621	
COMMUNITY HEALTH	1.2430	
CARDIOVASCULAR/THORACIC SURGERY	1.2046	
CARDIOLOGY	1.1631	
NEUROLOGY	1.1631	
ORTHOPEDIC	1.1567	
PSYCHIATRY	1.1056	
GENERAL SURGERY	1.1024	
SURGICAL CLINICS NEC	1.1024	
RHEUMATOLOGY	1.0960	QUARTILE 2
GASTROENTEROLOGY	1.0799	
EMERGENCY MEDICAL	1.0704	
MENTAL HEALTH	1.0608	
ALCOHOL/DRUG ABUSE REHABILITATION	1.0608	
ORTHOPEDIC APPLIANCE	1.0417	
MEDICAL EXAMINATION	1.0417	
		MEDIAN = 1.0
OTORHINOLARYNGOLOGY	0.9746	
UNDERSEAS MEDICINE	0.9714	
PSYCHOLOGY	0.9426	
FLIGHT MEDICINE	0.9138	
CHILD GUIDANCE	0.8915	
OPHTHALMOLOGY	0.8819	
FAMILY PRACTICE	0.8563	
DIABETIC	0.8531	
PRIMARY CARE	0.8404	
OBSTETRICS	0.8308	
OCCUPATIONAL HEALTH	0.8148	QUARTILE 3
ADOLESCENT	0.8116	
FAMILY PLANNING	0.7956	
GYNECOLOGY	0.7541	
PROCTOLOGY	0.7477	
HYPERTENSION	0.7413	
HAND SURGERY	0.7413	
SPEECH PATHOLOGY	0.7413	
DERMATOLOGY	0.6902	
SOCIAL WORK	0.6806	
PODIATRY	0.6742	
PEDIATRIC	0.6391	
PEDIATRIC CARE NEC	0.6391	
CAST	0.6391	
OPTOMETRY	0.5208	
WELL BABY	0.4985	
AUDIOLOGY	0.4793	QUARTILE 4
NEUROMUSCULOSKELETAL SCREENING	0.4250	
NUTRITION	0.4058	
ALLERGY	0.2652	
DENTAL SERVICES	0.1981	
TYPE 3 DENTAL PROS LAB	0.0735	
TYPE 1 DENTAL PROS LAB	0.0671	
TYPE 2 DENTAL PROS LAB	0.0543	

TABLE 3

## WORKLOAD CREDIT SHIFTS

## TWO DIGIT HCU TO AWU

## ALL FACILITIES - FISCAL YEAR 1985

CLINIC CODE AND ACCOUNT NAME <sup>1</sup>	OUTPAT. VISITS	INPAT. VISITS	TOTAL VISITS	DENTAL PROCED.	2 DIGIT OUTPAT. HCU	2 DIGIT DENTAL HCU	AWUS	DENTAL AWUS	2 DIGIT HCU->AWU CREDIT SHIFT
BA MEDICAL	4,567,148	689,294	5,256,442		100,477		158,320		+57.6%
BB SURGICAL	2,476,879	150,097	2,626,976		69,353		88,339		+27.4%
BC OBSTETRICAL/ GYNECOLOGICAL	3,544,854	11,339	3,556,193		74,442		87,986		+18.2%
BD PEDIATRIC	4,124,533	21,385	4,145,918		70,117		81,985		+16.9%
BE ORTHOPEDIC	2,118,900	109,960	2,228,860		59,329		67,080		+13.1%
BF PSYCHIATRIC/ MENTAL HEALTH	1,018,307	238,928	1,257,235		26,476		40,431		+52.7%
BG FAMILY PRACTICE	3,772,518	3,206	3,775,724		79,223		101,189		+27.7%
BH PRIMARY CARE	15,211,001	59,543	15,270,544		319,431		377,930		+18.3%
BI EMERGENCY MEDICAL	4,214,823	2,337	4,217,160		113,800		141,275		+24.1%
BJ FLIGHT MEDICINE	1,212,823	14,557	1,227,380		36,385		35,103		-3.5%
BK UNDERSEAS MEDICINE	7,258	452	7,710		109		234		+115.3%
CA DENTAL SERVICES*				49,224,150		246,121	310,112		+26.0%
CB TYPE 2 DENTAL				5,680,568		11,361	9,657		-15.0%
CC PROSTHETIC LAB				6,857,490		13,715	15,772		+15.0%
DHE PROSTHETIC LAB	662,624	0	662,624	972,215	17,228	2,065	14,114	2,042	-18.1%
FAB TYPE 1 DENTAL									0.0%
FAE PROSTHETIC LAB					304		1,285		+323.3%
ALCOHOL AND DRUG ABUSE REHAB. PROGRAM	11,674	27,022	38,696						
TOTALS	42,943,342	1,338,120	44,271,462	62,734,423	966,674	273,141	1,195,271	337,583	
					=====	=====	=====	=====	
					1,239,815		1,532,854		+23.6%

<sup>1</sup> Although AWU weights have been developed for FBA - Community Health and FBG - Occupational Health, FBA and FBG AWUS have not been included. In FY 1985 not all facilities accumulated this workload in FCOM files. Thus a distorted assessment of productivity would result.

\*NH Beaufort accumulated 2,911 outpatient visits and 92 inpatient visits in CA - Dental Services. Visits ignored in HCU or AWU computation.

\*\*In FY 1985 Social Work Services workload was accumulated as ancillary visits without inpatient vs. outpatient visit specification.

WORKLOAD CREDIT SHIFTS  
THREE DIGIT HCU TO AWU

3 DIGIT  
HCU ->AWU  
CREDIT  
SHIFT

CLINIC CODE AND ACCOUNT NAME <sup>1</sup>	OUTPAT. VISITS	INPAT. VISITS	TOTAL VISITS	DENTAL PROCED.	3 DIGIT OUTPAT. HCUS	3 DIGIT DENTAL HCUS	AWUS	DENTAL AWUS	HCU->AWUS CREDIT SHIFT
BA MEDICAL	4,567,148	689,294	5,256,442		128,379		158,320		+23.3%
BB SURGICAL	2,476,879	150,097	2,626,976		77,536		88,339		+13.9%
BC OBSTETRICAL/ GYNECOLOGICAL	3,544,854	11,339	3,556,193		80,508		87,986		+9.3%
BD PEDIATRIC	4,124,533	21,385	4,145,918		78,099		81,985		+5.0%
BE ORTHOPEDIC	2,118,900	109,960	2,228,860		57,572		67,080		+16.9%
BF PSYCHIATRIC/ MENTAL HEALTH	1,018,307	238,928	1,257,235		30,238		40,431		+33.7%
BG FAMILY PRACTICE	3,772,518	3,206	3,775,724		93,558		101,189		+8.2%
BH PRIMARY CARE	15,211,001	59,543	15,270,544		340,618		377,930		+11.0%
BI EMERGENCY MEDICAL	4,214,823	2,337	4,217,160		132,345		141,275		+6.7%
BJ FLIGHT MEDICINE	1,212,823	14,557	1,227,380		32,989		35,103		+6.4%
BK UNDERSEAS MEDICINE	7,298	452	7,710		226		234		-3.5%
CA DENTAL SERVICES*				49,224,150		285,500		310,112	+8.6%
CB TYPE 2 DENTAL				5,680,568		9,089		9,657	+6.3%
CC PROSTHETIC LAB				6,857,490		15,772		15,772	+0.0%
DHE PROSTHETIC LAB					13,252		14,114		+6.5%
FAB SOCIAL WORK**	662,624	0	662,624	972,215		1,556		2,042	+31.3%
TYPE 1 DENTAL									
PROSTHETIC LAB									
FAE ALCOHOL AND DRUG ABUSE REHAB. PROGRAM	11,674	27,022	38,696		325		1,285		+295.9%
TOTALS	42,943,342	1,338,120	44,271,462	62,734,423	1,065,645	311,917	1,195,271	337,583	+11.3%

Although AWU weights have been developed for FBA - Community Health and FBG - Occupational Health, FBA and FBG AWUS have not been included. In FY 1985 not all facilities accumulated this workload in PCOM files. Thus a distorted assessment of productivity would result.

\*NH Beaufort accumulated 2,911 outpatient visits and 92 inpatient visits in CA - Dental Services. Visits ignored in HCU or AWU computation.

\*\*In FY 1985 Social Work Services workload was accumulated as ancillary visits without inpatient vs. outpatient visit specification.

TABLE 5

DRG CASE COMPLEXITY AND AWU RESOURCE INTENSITY  
BY MATCHED MEPRS SUBACCOUNT WORK CENTERS

FISCAL YEAR 1985

IN/OUTPT MEPRS CODE	SUBACCOUNT NAME	USA			USN			USAF			MHSS			MHSS			AWU		
		HCFA G.M.	DRG CCI	WEIGHT	HCFA G.M.	DRG CCI	WEIGHT	HCFA G.M.	DRG CCI	WEIGHT	HCFA G.M.	DRG CCI	WEIGHT	HCFA G.M.	DRG CCI	WEIGHT	HCFA G.M.	DRG CCI	WEIGHT
AAA/BAA	INTERNAL MEDICINE	0.7088	1.2234	+	0.7529	1.2994	+	0.7498	1.2942	+	0.7300	1.2598	+	0.7300	1.2598	+	0.395	1.2621	+
AAB/BAC	CARDIOLOGY	0.8809	1.5203	+	0.8434	1.4557	+	0.8955	1.5455	+	0.8782	1.5157	+	0.8782	1.5157	+	0.364	1.1631	+
AAD/BAP	DERMATOLOGY	0.6566	1.1332	+	0.6450	1.1132	+	0.6389	1.1026	+	0.6504	1.1226	+	0.6504	1.1226	+	0.216	0.6902	+
AAE/BAF	ENDOCRINOLOGY	0.7448	1.2854	+	0.7423	1.2811	+	0.7443	1.2845	+	0.7445	1.2849	+	0.7445	1.2849	+	0.399	1.2749	+
AAF/BAG	GASTROENTEROLOGY	0.6927	1.1955	+	0.6954	1.2002	+	0.7631	1.3171	+	0.7018	1.2113	+	0.7018	1.2113	+	0.338	1.0799	+
AAG/BAH	HEMATOLOGY	0.9509	1.6412	+	0.9186	1.5854	+	0.9365	1.6164	+	0.9390	1.6208	+	0.9390	1.6208	+	0.455	1.4538	+
AAI/BAJ	NEPHROLOGY	0.9371	1.6174	+	0.8438	1.4563	+	1.1541	1.9919	+	1.0466	1.8063	+	1.0466	1.8063	+	0.629	2.0098	+
AAJ/BAK	NEUROLOGY	0.7633	1.3173	+	0.7403	1.2776	+	0.7189	1.2407	+	0.7454	1.2865	+	0.7454	1.2865	+	0.364	1.1631	+
AAK/BAM	ONCOLOGY	0.8579	1.4808	+	1.0339	1.7845	+	0.9090	1.5888	+	0.8865	1.5300	+	0.8865	1.5300	+	0.410	1.3101	+
AAL/BAN	PULMONARY DISEASE	0.7878	1.3596	+	0.9668	1.6685	+	0.9582	1.6338	+	0.8297	1.4319	+	0.8297	1.4319	+	0.343	1.0960	+
AAM/BAO	RHEUMATOLOGY	0.7804	1.3470	+	0.7612	1.3137	+	0.7871	1.3584	+	0.7546	1.3024	+	0.7546	1.3024	+	0.345	1.1024	+
ABA/BBA	GENERAL SURGERY	0.7421	1.2808	+	1.3164	2.2720	+	1.5733	2.7155	+	1.5905	2.7450	+	1.5905	2.7450	+	0.583	1.8628	+
ABB/BBB	CV/THOR SURGERY	1.7290	2.9841	+	0.8066	1.3922	+	0.8407	1.4511	+	0.8635	1.4904	+	0.8635	1.4904	+	0.276	0.8819	+
ABD/BBB	NEUROSURGERY	0.9092	1.5692	+	0.5260	0.9079	+	0.5344	0.9234	+	0.5225	0.9017	+	0.5225	0.9017	+	0.305	0.9746	+
ABE/BBB	OPHTHALMOLOGY	0.5140	0.8871	+	0.5014	0.8653	+	0.4780	0.8250	+	0.4885	0.8431	+	0.4885	0.8431	+	0.406	1.2973	+
ABG/BBF	OTORHINOLARYNG.	0.4857	0.8382	+	0.7146	1.2334	+	0.8133	1.4036	+	0.7458	1.2872	+	0.7458	1.2872	+	0.496	1.5848	+
ABH/BBG	PLASTIC SURGERY	0.8458	1.4598	+	0.7287	1.2577	+	0.7110	1.2270	+	0.6864	1.1847	+	0.6864	1.1847	+	0.397	1.2685	+
ABI/BBJ	PEDIATRIC SURGERY	0.6570	1.1340	+	0.6929	1.1959	+	0.7046	1.2160	+	0.6886	1.1885	+	0.6886	1.1885	+	0.236	0.7541	+
ABK/BBJ	UROLOGY	0.6757	1.1661	+	0.6223	1.0740	+	0.6649	1.1476	+	0.6418	1.1077	+	0.6418	1.1077	+	0.260	0.8308	+
ACA/BCB	GYNECOLOGY	0.6341	1.0944	+	0.4502	0.7770	+	0.4454	0.7687	+	0.4442	0.7667	+	0.4442	0.7667	+	0.020	0.6391	+
ACB/BCC	OBSTETRICS	0.4395	0.7586	+	0.6450	1.1133	+	0.6306	1.0884	+	0.6342	1.0947	+	0.6342	1.0947	+	0.362	1.1567	+
ADA/BDA	PEDIATRIC	0.6320	1.0908	+	0.7428	1.2821	+	0.7842	1.3190	+	0.7564	1.3055	+	0.7564	1.3055	+	0.346	1.1056	+
AEA/BEA	ORTHOPEDIC	0.7610	1.3135	+	0.8072	1.3931	+	0.8019	1.3840	+	0.8007	1.3820	+	0.8007	1.3820	+	0.332	1.0608	+
AF/BFA	PSYCHIATRY	0.7969	1.3754	+	0.7923	1.3674	+	N/A	N/A	+	0.7836	1.3524	+	0.7836	1.3524	+			
FAE/FAE	ALC/DA REHAB	0.7615	1.3143	+															

TABLE 6  
DESCRIPTIVE STATISTICS  
SUBACCOUNT AWU RII AND MEAN DRG CCI<sup>1</sup>

	N	MEAN	S.D.	SKEWNESS	KURTOSIS <sup>2</sup>
MHSS AWU RII	25	1.075	.295	.67	-1.44
MHSS DRG CCI	25	1.334	.375	2.16*	-4.06*
ARMY DRG CCI	25	1.335	.411	2.66*	-5.09*
NAVY DRG CCI	25	1.316	.305	1.12*	-2.76*
AIR FORCE DRG CCI	24	1.365	.393	1.75*	-3.91*

BBB - CARDIOVASCULAR SURGERY EXCLUDED

	N	MEAN	S.D.	SKEWNESS	KURTOSIS
MHSS AWU RII	24	1.075	.301	.66	-1.12
MHSS DRG CCI	24	1.276	.239	-.16	-1.28
ARMY DRG CCI	24	1.267	.233	-.47	-.68
NAVY DRG CCI	24	1.276	.235	-.08	-1.03
AIR FORCE DRG CCI	23	1.306	.274	-.20	-.90

<sup>1</sup>Not Elsewhere Classified subaccounts eliminated prior to computation.

<sup>2</sup>Geary's test of normality with Z-Score transformation used to evaluate kurtosis due to small sample sizes (see Appendix A).

\*Prob. < .01.

TABLE 7  
CORRELATIONS BETWEEN  
SUBACCOUNT AWU RII AND MEAN DRG CCI  
BY BRANCH OF SERVICE<sup>1</sup>

	N	SPEARMAN	PROB. (R = 0)
ARMY	25	.690	<.001
NAVY	25	.644	<.001
AIR FORCE	24	.683	<.001
MHSS	25	.646	<.001

BBB - CARDIOVASCULAR SURGERY EXCLUDED

	N	PEARSON	PROB. (R = 0)
ARMY	24	.692	<.001
NAVY	24	.612	<.001
AIR FORCE	23	.741	<.001
MHSS	24	.731	<.001

<sup>1</sup>Not Elsewhere Classified subaccounts eliminated prior to computation.



TABLE 8  
REGRESSION ANALYSIS PREDICTION OF  
SUBACCOUNT AWU RII  
BY SUBACCOUNT MEAN DRG CCI

PREDICTOR	N	INTERCEPT	SLOPE	ADJ R <sup>2</sup>	F-TEST	PROB.
ARMY MEAN DRG CCI	24	-.0714	.9942	.455	20.17	.0002
NAVY MEAN DRG CCI	24	.0820	.8668	.347	13.21	.0015
AIR FORCE MEAN DRG CCI	23	-.0055	.9180	.528	25.63	.0001
MHSS MEAN DRG CCI	24	-.1142	1.0205	.513	25.19	.0001

TABLE 9

CONTINGENCY TABLE ANALYSIS - RESIDUAL SIGN BY  
SUMMARY ACCOUNT CLASSIFICATION OF SUBACCOUNT

## U.S. ARMY

		RESIDUAL SIGN		ROW TOT
		NEG.	POS.	
FREQ.				
MEDICINE	ROW %	9	5	14
		64.29	35.71	
FREQ.				
SURGERY	ROW %	4	6	10
		40.00	60.00	
COL TOT		13	11	24

PROB. = .408\*

## U.S. AIR FORCE

		RESIDUAL SIGN		ROW TOT
		NEG.	POS.	
FREQ.				
MEDICINE	ROW %	9	5	14
		64.29	35.71	
FREQ.				
SURGERY	ROW %	3	7	10
		40.00	60.00	
COL TOT		12	12	24

$\chi^2 = 2.743$ , PROB. = .098

## U.S. NAVY

		RESIDUAL SIGN		ROW TOT
		NEG.	POS.	
FREQ.				
MEDICINE	ROW %	11	3	14
		78.57	21.43	
FREQ.				
SURGERY	ROW %	3	7	10
		30.00	70.00	
COL TOT		14	10	24

PROB. = .035\*

## MILITARY HEALTH SERVICE SYSTEM

		RESIDUAL SIGN		ROW TOT
		NEG.	POS.	
FREQ.				
MEDICINE	ROW %	10	4	14
		71.43	28.57	
FREQ.				
SURGERY	ROW %	3	7	10
		30.00	70.00	
COL TOT		13	11	24

PROB. = .095\*

\*Cell expected frequencies were less than 5, Fisher's exact two-tailed test was used.

TABLE 10  
REGRESSION ANALYSIS PREDICTION OF  
SUBACCOUNT AWU RII  
BY SUBACCOUNT MEAN DRG CCI  
MHSS - EXPANDED MODEL

ANALYSIS OF VARIANCE

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	ADJ R <sup>2</sup>	F-TEST	PROB.
MODEL	2	1.7174	.8587	.642	21.583	.0001
ERROR	21	.8355	.0398			
TOTAL	23	2.5529				

PARAMETER ESTIMATES

COEFFICIENT	PARAMETER ESTIMATE	STANDARD ERROR	T-TEST H0: PARAMETER=0	PROB.
B <sub>0</sub>	-.6170	.2820	-2.188	.0401
B <sub>1</sub>	1.3215	.2014	6.561	.0001
B <sub>2</sub>	.2848	.0954	2.986	.0071
-----				
B <sub>3</sub> *	-.4331	.4013	-1.079	.2933

\*Coefficients were derived using stepwise regression with maximum variance improvement as entry criteria. The B<sub>3</sub> coefficient is the value that would have resulted had it been added to the model.

## CHAPTER 4. CONCLUSIONS AND RECOMMENDATIONS

a. Conclusions. Subaccount ambulatory location parameter costs and the AWU weights that were derived from these costs indicated that the AWU demonstrated substantial variance in interval scale measurement. This same variance was demonstrated by the range of relative resource intensity of facility ambulatory output. This range in facility AWU RII exhibited by each branch of service demonstrated that the AWU discriminated in facility relative resource intensity of ambulatory output. This discrimination of output was considered a necessary prerequisite for implementation. As a scale the AWU demonstrated very high stability over time. Individual subaccounts which demonstrated instability were adjusted for variance.

The AWU provided substantially greater credit to ambulatory care than either the two digit HCU or the outpatient three digit HCU. The increased ambulatory emphasis of the AWU relative to inpatient care was a result of four factors: (1) modifications in weight derivation; (2) use of total ambulatory visits in the calculation of AWUs; (3) reallocation of inpatient visit costs to ambulatory clinics; and (4) a conservative decision tree. The increased credit to ambulatory care suggested that the AWU would provide greater credit incentive to use ambulatory services. The inclusion of inpatient visits will benefit those hospitals producing this type of workload representing a clear credit

transfer effect within MHSS, whereas, factors 1,3, and 4 will provide greater credit to potentially all MHSS facilities.

The methodology used in this report produced an ambulatory workload credit system aligned with the method by which clinics were actually funded. This alignment with funding was because non-clinician inpatient visit costs were reallocated back to the appropriate ambulatory department and the AWU calculation was based on this reallocation.

Case complexity based on DRGs was used as an outside criterion for the AWU because of two reasons: (1) DRG case complexity was a much more developed workload measurement system, and (2) Congress has mandated that DRGs be used to measure inpatient productivity in MHSS hospitals. The AWU as a measurement instrument was evaluated using this criterion by examining the predictive relationships between DRG case complexity and AWU resource intensity. Correlation analysis demonstrated that the relationship between specialty DRG case complexity and AWU resource intensity was positive, moderately high, and statistically significant for all three service branches separately and when combined into an overall MHSS correlation. This relationship was verified by regression analysis which demonstrated statistically significant, moderately strong, positive relationships between specialty DRG case complexity and AWU resource intensity. This relationship was seen when analyzing the three service branches separately and

when combined into an overall MHSS equation. Regression analysis indicated that two quantitatively separate, predictive relationships were present between DRG case complexity and AWU resource intensity, one relationship for medical specialties and a second for surgical specialties. Expanding the model to account for specialty served to increase the strength of the positive relationship substantially. The model indicated that for any given level of inpatient DRG case complexity the resource intensity of the ambulatory equivalent of that inpatient subaccount was substantially higher when the ambulatory subaccount was a surgical specialty rather than a medical specialty.

The AWU represents a resource intensity sensitive weighted index compatible with inpatient care DRG weighting and is designed to be implemented concomitantly with DRG inpatient weights. Further, the AWU would require relatively little funding to implement as it is compatible with existing data collection methods and reporting requirements.

b. Recommendations. In view of the findings of this report the following recommendations are made.

(1) Implement the AWU as the weighted classification of ambulatory workload within MHSS until such time as the AWU is replaced by a patient specific ambulatory workload measurement system (e.g., ambulatory visit groups). Make implementation of the AWU effective 1 October 1988.

(2) Mandate use of the AWU wherever workload exhibits are submitted, to include but not limited to MEPRS performance reports and financial displays.

(3) Require that the AWU be the ambulatory workload measurement used in conjunction with the DRG based inpatient work unit in the resource allocation systems developed by the service branches in response to the National Defense Authorization Act for Fiscal Year 1987.

(4) Initiate a study to identify and enumerate appropriate ambulatory surgery procedures for eventual inclusion in the workload system consisting of AWU based ambulatory measurement and DRG based inpatient measurement.

(5) With any workload credit system based on structure there is the possibility of manipulation in data reporting. It is recommended that strict uniform criteria be established for the reporting of data in clinic subaccounts. It is also recommended that procedures be implemented to require the approval of subaccounts for reporting workload at the facility level prior to allowing workload to be reported in the subaccount and that workload reported in unapproved subaccounts not be credited until the subaccount is approved.

(6) Not elsewhere classified subaccounts were weighted such that there would be no explicit incentive to use these subaccounts for reporting workload. There are

MTFs which use these subaccounts for ambulatory visits generated as part of unique, large scale, and high visibility programs (e.g., Joint Military Medical Consortium Burn Center and AIDS programs). A number of MTFs use these subaccounts for workload which is not part of any such program. It is recommended that the service branches be requested to petition for specific factor additives for such usually expensive programs and unique adjustment factors be developed to provide explicit added credit for these unique mission responsibilities.

(7) A minimum of one fiscal year of data should be accumulated prior to deriving a computed AWU weight for any new subaccount. Two years of data would be preferred.

(8) Two fiscal years of data are required to recalibrate the AWU. To coincide with budgetary data submission timetables, an evaluation of weight stability should be conducted first quarter FY 1989, to determine if the AWU requires recalibration prior to FY 1990.

(9) Following initial evaluation of weight stability in first quarter FY 1989, evaluation of scale stability should be conducted every other year. It is anticipated that this frequency of scale evaluation could be modified as historical data is accumulated.



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APPENDIX A

SUMMARY OF

STATISTICAL ALGORITHMS

## SUMMARY OF STATISTICAL ALGORITHMS

a. Geary Test: Null hypothesis is normality, alternative hypothesis is non-normality due to kurtosis. Geary's Statistic:

$$a = \frac{\sum |X - \bar{X}|}{\sqrt{N \sum (X - \bar{X})^2}}$$

is first computed then transformed to standard normal deviate form using the following formula:

$$Z = \frac{(a - .7979) \sqrt{N}}{.2123}$$

A detailed discussion of Geary's statistic can be found in D'Agostino (1970).

b. Location Parameters: Four location parameters were considered in selected accounts. These parameters include the following:

(1) Arithmetic mean: Calculated by summing all observations and dividing this sum by the number of observations.

(2) Geometric mean: Calculated by computing the antilogarithm of the mean of the logarithms of the observations.

(3) Median: That value, in an ordered array, that has an equal number of observations above and below it. Median is also known as the 50th percentile.

(4) Square transformed mean: The arithmetic mean of observations whose values have been squared. The effect is to normalize data when it is negatively skewed. (Klienbaum and Kupper, 1978).

d. Logarithm Transformation: Observation values are transformed to the natural logarithm. The effect is to normalize data when it is positively skewed.

e. Observation Standardization: In order to use the table of normal distribution, observations were rescaled to a mean equal 0 and a standard deviation equal 1 using the following equation:

$$Z_{ij} = (x_{ij} - u_j) / s_j$$

where:  $Z_{ij}$  = Standardized score of observation<sub>i</sub> in subaccount work center<sub>j</sub>, (also called standard normal deviate, or Z-score).

$x_{ij}$  = The value of observation<sub>i</sub> in subaccount work center<sub>j</sub>.

$u_j$  = The mean of subaccount work center<sub>j</sub>.

$s_j$  = The standard deviation of subaccount work center<sub>j</sub>.

$j$  = (e.g., BAA, BBA, BBC, etc.)

For all ambulatory subaccounts observations were screened at + or - 2.0 standard deviations. The probability of a value outside 2.0 standard deviations ranges from .0456 for

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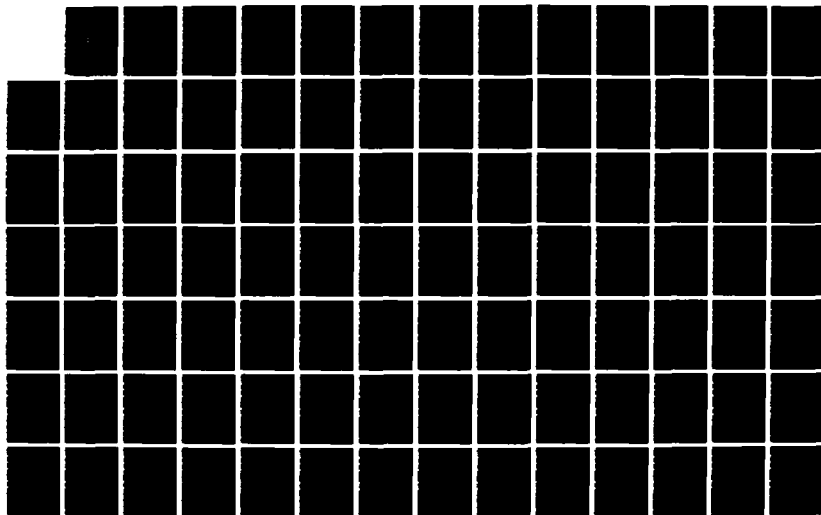
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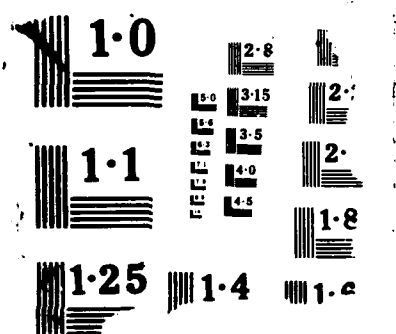
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subaccounts with N sizes greater than 120. The probability increases to 6.2% when the subaccount N size drops to 20.

f. Skewness: In a distribution if low values are bunched close to the mean and high values extend far above the mean this measure will be positive. When the low values of a distribution are extended, skewness will be negative. Tests of significance in this study utilized one-tail distribution .01 percentage points as provided by Snedecor and Cochran (1980). Coefficient of skewness is computed as follows:

$$M_3 / (M_2 \sqrt{M_2})$$

$$\text{where: } M_2 = \sum (X - \bar{X})^2 / N$$

$$M_3 = \sum (X - \bar{X})^3 / N$$

APPENDIX B

DETAILED PRESENTATION OF  
AMBULATORY WORK UNIT WEIGHTS

TABLE B-1

## AWU WEIGHTS - MEDICAL CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL	AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT	INITIAL		FINAL		AWU RII
						N		N		
BAA	INTERNAL MEDICINE		\$72.66	GM	.0395	(165)		158		1.2621
BAB	ALLERGY		\$15.19	GM	.0083	(145)		135		0.2652
BAC	CARDIOLOGY		\$66.98	AM	.0364	(40)		36		1.1631
BAE*	DIABETIC		\$49.09	AM	.0267	(16)		13		0.8531
BAF*	ENDOCRINOLOGY (METAB)		\$73.39	GM	.0399	(24)		22		1.2749
BAG	GASTROENTEROLOGY		\$62.17	AM	.0338	(35)		32		1.0799
BAH	HEMATOLOGY		\$83.69	GM	.0455	(20)		19		1.4538
BAI	HYPERTENSION		\$42.66	GM	.0232	(27)		25		0.7413
BAJ	NEPHROLOGY		\$115.74	AM	.0629	(20)		19		2.0098
BAK	NEUROLOGY		\$67.06	GM	.0364	(56)		51		1.1631
BAL	NUTRITION		\$23.29	GM	.0127	(149)		141		0.4058
BAM*	ONCOLOGY		\$85.77	AM	.0466	(24)		23		1.4890
BAN*	PULMONARY DISEASE		\$75.44	AM	.0410	(29)		28		1.3101
BAO	RHEUMATOLOGY		\$63.22	GM	.0343	(20)		19		1.0960
BAP	DERMATOLOGY		\$39.70	GM	.0216	(102)		95		0.6902
BAQ	INFECTIOUS DISEASE		\$72.66**	GM	.0395	(0)		0		1.2621
BAZ	MEDICAL CLINICS NEC		\$72.66***	GM	.0395	N/A		N/A		1.2621

<sup>1</sup>AM - arithmetic mean, GM - geometric mean.

\*FY 1984 and FY 1985 data used for ambulatory visit cost calculation.

\*\*No data reported in FY 1985. Fiscal Year 1986 data was examined and a number of facilities had active accounts but no workload. In addition, several of those facilities reporting workload and cost did not have a complete year of data. Subaccount assigned visit cost, location parameter and AWU weight for BAA - Internal Medicine.

\*\*\*Data reported in FY 1985 was very unstable. Subaccount assigned cost factor, location parameter and AWU weight for BAA - Internal Medicine.

TABLE B-2  
AWU WEIGHTS - SURGICAL CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL			AWU WEIGHT	INITIAL N	FINAL N	AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>					
BBA	GENERAL SURGERY	\$63.57	GM		.0345	(162)	154	1.1024
BBB*	CARDIOVASCULAR AND THORACIC SURGERY	\$69.43	AM		.0377	(21)	20	1.2046
BBC	NEUROSURGERY	\$107.22	AM		.0583	(17)	16	1.8628
BBD	OPHTHALMOLOGY	\$50.86	GM		.0276	(99)	94	0.8819
BBE*	ORGAN TRANSPLANT	\$133.14	AM		.0723	(2)	2	2.3102
BBF	OTORHINOLARYNGOLOGY	\$56.19	GM		.0305	(97)	92	0.9746
BBG	PLASTIC SURGERY	\$74.76	AM		.0406	(22)	22	1.2973
BBH	PROCTOLOGY	\$43.08	AM		.0234	(16)	14	0.7477
BBI	UROLOGY	\$72.98	GM		.0397	(90)	84	1.2685
BBJ	PEDIATRIC SURGERY	\$91.21	AM		.0496	(3)	3	1.5848
BBZ	SURGICAL CLINICS NEC	\$63.57**	GM		.0345	N/A	N/A	1.1024

<sup>1</sup>AM - arithmetic mean, GM - geometric mean.

\*FY 1984 and FY 1985 data used for ambulatory visit cost calculation.

\*\*No data reported in FY 1985. Subaccount assigned cost factor,  
location parameter and AWU weight for BBA - General Surgery.

TABLE B-3

## AWU WEIGHTS - OBSTETRICAL/GYNECOLOGICAL CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL					AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT	INITIAL N	FINAL N	
BCA	FAMILY PLANNING	\$45.79	GM	.0249	(63)	54	0.7956
BCB	GYNECOLOGY	\$43.40	GM	.0236	(187)	175	0.7541
BCC	OBSTETRICS	\$47.91	GM	.0260	(168)	158	0.8308

<sup>1</sup>GM - geometric mean.

TABLE B-4

## AWU WEIGHTS - PEDIATRIC CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL				INITIAL N	FINAL N	AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT				
BDA	PEDIATRIC	\$36.86	GM	.0200	(194)	187	0.6391	
BDB	ADOLESCENT	\$46.66	AM	.0254	(34)	31	0.8116	
BDC	WELL BABY	\$28.66	GM	.0156	(149)	137	0.4985	
BDZ	PEDIATRIC CARE NEC	\$36.86*	GM	.0200	N/A	N/A	0.6391	

<sup>1</sup>AM - arithmetic mean, GM - geometric mean.

\*Data reported in FY 1985 was very unstable. Subaccount assigned cost factor, location parameter and AWU weight for BDA - pediatric.

TABLE B-5  
AWU WEIGHTS - ORTHOPEDIC CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL			AWU WEIGHT	INITIAL		FINAL		AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>			N		N		
BEA	ORTHOPEDIC	\$66.54	GM		.0362	(125)		118		1.1567
BEB	CAST	\$36.87	GM		.0200	(88)		79		0.6391
BEC*	HAND SURGERY	\$42.69	GM		.0232	(9)		9		0.7413
BED*	NEUROMUSCULOSKELETAL SCREENING	\$24.40	MED		.0133	(16)		14		0.4250
BEE	ORTHOPEDIC APPLIANCE	\$59.93	GM		.0326	(57)		54		1.0417
BEF	PODIATRY	\$38.91	GM		.0211	(78)		73		0.6742

<sup>1</sup>AM - arithmetic mean, GM - geometric mean, MED - median.

\*FY 1984 and FY 1985 data used for ambulatory cost visit calculation.

TABLE B-6

## AWU WEIGHTS - PSYCHIATRIC/MENTAL HEALTH CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL				AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT	INITIAL N	FINAL N
BFA	PSYCHIATRY	\$63.60	GM	.0346	(74)	70
BFB	PSYCHOLOGY	\$54.31	GM	.0295	(70)	65
BFC	CHILD GUIDANCE	\$51.34	GM	.0279	(17)	15
BFD*	MENTAL HEALTH	\$61.11	GM	.0332	(126)	116
						1.1056
						0.9426
						0.8915
						1.0608

<sup>1</sup>GM - geometric mean.

\*FY 1984 and FY 1985 data used for ambulatory visit cost calculation.



TABLE B-7  
AWU WEIGHTS - PRIMARY MEDICAL CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL	AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT	INITIAL N	FINAL N	AWU RII
BHA	PRIMARY CARE		\$48.41	AM	.0263	(179)	165	0.8404
BHB	MEDICAL EXAMINATION		\$60.03	GM	.0326	(138)	125	1.0417
BHC	OPTOMETRY		\$30.03	GM	.0163	(204)	191	0.5208
BHD	AUDIOLOGY		\$27.66	GM	.0150	(72)	67	0.4793
BHE	SPEECH PATHOLOGY		\$42.64	GM	.0232	(33)	30	0.7413
BHG*	PRIMUS		\$48.41	AM	.0263	N/A	N/A	0.8404

<sup>1</sup>AM - arithmetic mean, GM - geometric mean.

\*Scheduled to be added in FY 1988. Subaccount assigned cost factor, location parameter and AWU weight for BHA - Primary Care.

TABLE B-8  
AWU WEIGHTS - AMBULATORY CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	TWO DIGIT LEVEL				AWU WEIGHT	INITIAL N	FINAL N	AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>						
BG	FAMILY PRACTICE	\$49.24	AM			.0268	(105)	99	0.8563
BI	EMERGENCY MEDICAL	\$61.60	MED			.0335	(197)	184	1.0704
BJ	FLIGHT MEDICINE	\$52.72	GM			.0286	(175)	167	0.9139
BK*	UNDERSEAS MEDICINE	\$55.97	MED			.0304	(5)	5	0.9714

<sup>1</sup>AM - arithmetic mean, GM - geometric mean, MED - median.

\*FY 1984 and FY 1985 data used in ambulatory visit cost calculation.

TABLE B-9  
AWU WEIGHT - ANCILLARY SERVICE CLINIC ACCOUNT

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL					AWU RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT	INITIAL N	FINAL N	
DHE	SOCIAL WORK SERVICES	\$39.29*	GM	.0213	(148)	140	0.6806

<sup>1</sup>GM - geometric mean.

\*MEPRS subaccount DHE - Social Work Services used to calculate subaccount cost factor, location parameter and AWU weight for BFE - Social Work.

TABLE B-10  
AWU WEIGHTS - DENTAL CARE ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	TWO DIGIT LEVEL				AWU WEIGHT	INITIAL N	FINAL N	AWU RII
		DENTAL WTED PROCEDURE	LOCATION PARAMETER <sup>1</sup>	LOCATION PARAMETER <sup>1</sup>	COST				
CA	DENTAL SERVICES	\$11.53	GM			.0063	(207)	196	.2013
CB	TYPE 2 DENTAL PROSTHETIC LABORATORY	\$3.04	GM			.0017	(54)	48	.0543
CC	TYPE 3 DENTAL PROSTHETIC LABORATORY	\$4.26	GM			.0023	(142)	133	.0735

<sup>1</sup>GM - geometric mean.

TABLE B-11

## AWU WEIGHTS - SPECIAL PROGRAMS CLINIC ACCOUNTS

CODE	SUBACCOUNT WORK CENTER	THREE DIGIT LEVEL				INITIAL N	FINAL N	AWC RII
		AMBULATORY VISIT COST	LOCATION PARAMETER <sup>1</sup>	AWU WEIGHT				
FAB	TYPE I DENTAL PROSTHETIC LAB	\$3.91*	AM	.0021	8	2	.0671	
FBA	COMMUNITY HEALTH	\$71.61**	MED	.0389	48	43	1.2430	
FBG	OCCUPATIONAL HEALTH	\$47.01***	GM	.0255	48	44	0.8148	
FAE	ALCOHOL AND DRUG ABUSE/REHABILITATION PROGRAM	\$61.11****	GM	.0332	N/A	N/A	1.0608	

<sup>1</sup>AM - arithmetic mean, GM - geometric mean, MED - Median.

\*Dental weighted procedure cost.

\*\*Subaccount is scheduled to become BHF - Community Health. Computed weight would also transfer.

\*\*\*FY 1986 data used for ambulatory visit cost calculation. Subaccount is scheduled to become BHG - Occupational Health. Computed weight would also transfer.

\*\*\*\*Incremental outpatient costs could not be separated. Subaccount assigned cost factor, location parameter, and AWU weight for BFD - Mental Health. Subaccount is scheduled to become BFF - Substance Abuse. Assigned weight would also transfer.

APPENDIX C

MILITARY HEALTH SERVICE SYSTEM

MEDICAL TREATMENT FACILITY

AMBULATORY WORK UNIT PRODUCTION

FISCAL YEAR 1985

TABLE C-1  
AWU PRODUCTION

U.S. ARMY

FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
WALTER REED ARMY MEDICAL CENTER	811002	24099	.0297	1.1006
USA HOSP LANDSTUHL	532916	15630	.0293	1.0863
BROOKE ARMY MEDICAL CENTER	860147	25120	.0292	1.0817
FITZSIMONS ARMY MEDICAL CENTER	556327	16226	.0292	1.0803
LETTERMAN ARMY MEDICAL CENTER	454660	13047	.0287	1.0629
MEDDAC REDSTONE ARSENAL	125746	3599	.0286	1.0600
MEDDAC FT IRWIN	54463	1523	.0280	1.0357
MEDDAC WEST POINT	143025	3999	.0280	1.0355
TRIPLER ARMY MEDICAL CENTER	723972	20058	.0277	1.0262
USA MEDDAC WUERZBURG	297640	8225	.0276	1.0235
MEDDAC FT MCCLELLAN	160242	4425	.0276	1.0229
MEDDAC FT BENNING	574066	15809	.0275	1.0200
USA MEDDAC NUERNBERG	475216	12952	.0273	1.0095
MADIGAN ARMY MEDICAL CENTER	820947	22324	.0272	1.0072
MEDDAC FT POLK	265537	7219	.0272	1.0069
WILLIAM BEAUMONT ARMY MED CENTER	727689	19776	.0272	1.0066
MEDDAC FT BRAGG	723353	19561	.0270	1.0016
MEDDAC BAD CANNSTATT	319925	8646	.0270	1.0010
MEDDAC FT BENJ HARRISON	91320	2464	.0270	0.9994
MEDDAC FT EUSTIS	206699	5576	.0270	0.9992
EISENHOWER ARMY MEDICAL CENTER	617747	16648	.0269	0.9982
MEDDAC VICENZA	79645	2140	.0269	0.9954
130TH STATION HOSPITAL	311032	8347	.0268	0.9940
18TH MEDCOM HOSPITAL	420682	11279	.0268	0.9931

TABLE C-1 (CONT'D)  
AWU PRODUCTION  
U.S. ARMY  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
MEDDAC FT SILL	410839	10988	.0267	0.9906
MEDDAC FT ORD	455371	12175	.0267	0.9903
MEDDAC FT BELVOIR	423679	11322	.0267	0.9898
MEDDAC FT MEADE	394709	10543	.0267	0.9893
MEDDAC FT RUCKER	194717	5194	.0267	0.9879
MEDDAC FT HOOD	639536	17015	.0266	0.9854
MEDDAC FT LEE	181832	4833	.0266	0.9844
MEDDAC FT CARSON	339054	9001	.0265	0.9832
MEDDAC BREMERHAVEN	91107	2411	.0265	0.9803
MEDDAC FT DEVENS	200612	5303	.0264	0.9790
MEDDAC FT LEAVENWORTH	205179	5408	.0264	0.9762
MEDDAC PANAMA	251551	6619	.0263	0.9746
MEDDAC FT DIX	349128	9167	.0263	0.9725
MEDDAC AUGSBURG	195349	5115	.0262	0.9699
FRANKFURT ARMY MEDICAL CENTER	701178	18327	.0261	0.9681
MEDDAC FT WAINWRIGHT	116789	3041	.0260	0.9644
MEDDAC FT MONMOUTH	158949	4127	.0260	0.9617
MEDDAC FT CAMPBELL	469198	12156	.0259	0.9596
MEDDAC FT JACKSON	434136	11236	.0259	0.9586
MEDDAC FT STEWART	323130	8341	.0258	0.9561
MEDDAC FT KNOX	464039	11798	.0254	0.9417
MEDDAC JAPAN	37859	962	.0254	0.9410
MEDDAC FT LEONARD WOOD	412280	10464	.0254	0.9401
MEDDAC FT HUACHUCA	151848	3841	.0253	0.9369
MEDDAC FT RILEY	358892	8990	.0250	0.9278
U.S. ARMY TOTAL	18314959	497069		



TABLE C-2

## AWU PRODUCTION

## U.S. NAVY

FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
NAVAL HOSPITAL BETHESDA	595401	17953	.0302	1.1168
NAVAL HOSPITAL PORTSMOUTH	516543	15515	.0300	1.1125
NAVAL HOSPITAL PHILADELPHIA	258326	7363	.0285	1.0557
NAVAL HOSPITAL ROOSEVELT ROADS	84465	2397	.0284	1.0511
NAVAL HOSPITAL SAN DIEGO	734797	20705	.0282	1.0437
NAVAL HOSPITAL YOKOSUKA	206273	5806	.0281	1.0426
NAVAL HOSPITAL CAMP LEJEUNE	392181	10968	.0280	1.0358
NAVAL HOSPITAL CORPUS CHRISTI	200749	5607	.0279	1.0345
NAVAL HOSPITAL BREMERTON	215285	6011	.0279	1.0341
NAVAL STATION HOSPITAL	36757	1025	.0279	1.0327
NAVAL HOSPITAL GUAM	123844	3426	.0277	1.0248
NAVAL HOSPITAL OKINAWA	188515	5213	.0277	1.0242
NAVAL HOSPITAL BEAUFORT	404333	11166	.0276	1.0229
NAVAL HOSPITAL MILLINGTON	201457	5551	.0276	1.0205
NAVAL HOSPITAL NEWPORT	178472	4913	.0275	1.0196
NAVAL HOSPITAL OAKLAND	581919	16011	.0275	1.0191
NAVAL HOSPITAL JACKSONVILLE	573711	15759	.0275	1.0174
NAVAL HOSPITAL GUANTANAMO BAY	55182	1513	.0274	1.0156
NAVAL HOSPITAL SUBIC BAY	208533	5665	.0272	1.0062
NAVAL HOSPITAL OAK HARBOR	108003	2928	.0271	1.0040
MEDICAL DEPARTMENT (YUMA)	36971	1002	.0271	1.0040
NAVAL HOSPITAL PENSACOLA	460504	12467	.0271	1.0027
NAVAL HOSPITAL ROTA	63531	1716	.0270	1.0006
NAVAL HOSPITAL PATUXENT RIVER	74357	2004	.0269	0.9982

TABLE C-2 (CONT'D)  
AWU PRODUCTION  
U.S. NAVY  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
NAVAL HOSPITAL CHERRY POINT	160461	4317	.0269	0.9965
NAVAL HOSPITAL LONG BEACH	357041	9553	.0268	0.9910
NAVAL MEDICAL CLINIC PEARL HARBOR	278750	7455	.0267	0.9906
NAVAL HOSPITAL CHARLESTON	449835	12020	.0267	0.9897
NAVAL HOSPITAL BREMERTON	16681	445	.0267	0.9882
NAVAL HOSPITAL NAPLES	103696	2758	.0266	0.9853
NAVAL HOSPITAL CAMP PENDLETON	457908	12145	.0265	0.9824
NAVAL HOSPITAL ORLANDO	312021	8252	.0264	0.9796
NAVAL MEDICAL CLINIC QUANTICO	141960	3745	.0264	0.9771
NAVAL MEDICAL CLINIC PORTSMOUTH	50175	1320	.0263	0.9741
NAVAL HOSPITAL LEMOORE	131809	3445	.0261	0.9681
NAVAL HOSPITAL GREAT LAKES	664727	17030	.0256	0.9489
NAVAL HOSPITAL GROTON	237571	6064	.0255	0.9454
NAVAL MEDICAL CLINIC KEY WEST	45991	1169	.0254	0.9411
NAVAL MEDICAL CLINIC SEATTLE	39371	994	.0252	0.9350
NAVAL MEDICAL CLINIC PORT HUENEME	86920	2164	.0249	0.9223
NAVAL MEDICAL CLINIC NEW ORLEANS	60193	1496	.0249	0.9207
NAVAL MEDICAL CLINIC ANNAPOLIS	88479	2193	.0248	0.9179
NAVAL MEDICAL CLINIC SAN DIEGO	419272	10330	.0246	0.9126
NAVAL MEDICAL CLINIC NORFOLK	694246	16606	.0239	0.8859
NAVAL MEDICAL CLINIC WASH DC	83719	1995	.0238	0.8825
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U.S. NAVY TOTAL	11380935	308180		

TABLE C-3

## AWU PRODUCTION

## U.S. AIR FORCE

## FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF HOSP, KUNSAN	28935	837	.0289	1.0718
USAF HOSP, OSAN	130394	3751	.0288	1.0654
GRANT MED CENTER, TRAVIS AFB	365255	10388	.0284	1.0534
USAF HOSP, IRAKLION CRETE	15958	451	.0283	1.0477
WILFORD HALL MED CENTER, LACKLAND AFB	913602	25779	.0282	1.0451
USAF HOSP, INCIRLIK	45812	1286	.0281	1.0400
USAF HOSP, PATRICK AFB	131866	3677	.0279	1.0327
MALCOLM GROW MED CENTER, ANDREWS AFB	432529	12044	.0278	1.0314
USAF ACADEMY HOSP	229174	6379	.0278	1.0310
USAF HOSP, ENGLAND AFB	87892	2436	.0277	1.0266
USAF HOSP, LAKENHEATH	157384	4359	.0277	1.0259
MED CENTER, WRIGHT-PATTERSON AFB	329026	9113	.0277	1.0258
USAF HOSP, BITBURG	90158	2487	.0276	1.0219
USAF HOSP, WIESBADEN	190892	5264	.0276	1.0213
USAF HOSP, ATHENS	41927	1152	.0275	1.0177
USAF HOSP, CLARK	280429	7703	.0275	1.0174
KEESLER MED CENTER, KEESLER AFB	386577	10612	.0275	1.0168
USAF HOSP, HOMESTEAD AFB	202062	5543	.0274	1.0161
USAF HOSP, ELMENDORF AFB	203925	5585	.0274	1.0144
MINOT REG HOSP, MINOT AFB	110756	3031	.0274	1.0138
USAF HOSP, BERGSTROM AFB	129351	3540	.0274	1.0136
USAF HOSP, MYRTLE BEACH AFB	84853	2317	.0273	1.0114
USAF HOSP, EDWARDS AFB	93230	2540	.0272	1.0093
USAF HOSP, LANGLEY AFB	244917	6671	.0272	1.0089

TABLE C-3 (CONT'D)  
AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF REG HOSP, EGLIN AFB	338704	9222	.0272	1.0085
TUSLOG DET 119, IZMIR	17565	478	.0272	1.0076
USAF HOSP, NELLIS AFB	189904	5164	.0272	1.0073
SHAW REG HOSP, SHAW AFB	135259	3674	.0272	1.0060
USAF HOSP, YOKOTA	86528	2350	.0272	1.0059
USAF HOSP, TYNDALL AFB	145102	3932	.0271	1.0037
USAF HOSP, MOODY AFB	101019	2736	.0271	1.0031
USAF HOSP, BLYTHEVILLE AFB	74826	2019	.0270	0.9993
MARCH REG HOSP, MARCH AFB	202384	5456	.0270	0.9985
USAF REG HOSP, SHEPPARD AFB	213399	5752	.0270	0.9983
SCOTT MED CENTER, SCOTT AFB	294215	7927	.0269	0.9979
USAF HOSP, FAIRCHILD AFB	118893	3203	.0269	0.9977
USAF HOSP, ALTUS AFB	88708	2389	.0269	0.9976
USAF HOSP, CHANUTE AFB	126608	3410	.0269	0.9976
TUSLOG DET 37, ANKARA	10944	295	.0269	0.9975
USAF HOSP, DAVIS-MONTHON AFB	231164	6215	.0269	0.9957
USAF HOSP, MATHER AFB	215354	5785	.0269	0.9949
USAF CLINIC, NEW AMSTERDAM	21331	572	.0268	0.9926
USAF HOSP, CANNON AFB	101929	2730	.0268	0.9921
USAF CLINIC, ANDERSON GUAM	73021	1955	.0268	0.9917
USAF HOSP, ELLSWORTH AFB	114965	3074	.0267	0.9904
USAF CLINIC, GEILENKIRCHEN	24712	659	.0267	0.9884
USAF HOSP, VANDENBERG AFB	136739	3642	.0266	0.9865
USAF CLINIC, ZARAGOZA	21748	579	.0266	0.9864
USAF REG HOSP, CARSWELL AFB	266644	7098	.0266	0.9860
USAF HOSP, LORING AFB	67665	1801	.0266	0.9857
USAF HOSP, DOVER AFB	121781	3240	.0266	0.9853

TABLE C-3 (CONT'D)  
AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF HOSP, CASTLE AFB	134587	3580	.0266	0.9852
USAF CLINIC, SEMBACH	38631	1027	.0266	0.9851
USAF HOSP, F E WARREN AFB	92961	2472	.0266	0.9850
USAF CLINIC, KADENA	139093	3698	.0266	0.9847
USAF HOSP, LUKE AFB	202673	5383	.0266	0.9837
USAF HOSP, MOUNTAIN HOME AFB	88102	2339	.0265	0.9833
USAF CLINIC, CANAL ZONE	34212	908	.0265	0.9830
USAF HOSP, HILL AFB	156847	4162	.0265	0.9829
USAF CLINIC, GREENHAM COMMON	19649	521	.0265	0.9812
MACDILL REG HOSP, MACDILL AFB	213810	5659	.0265	0.9804
USAF HOSP, PEASE AFB	136058	3597	.0264	0.9791
USAF CLINIC, FAIRFORD	18165	480	.0264	0.9783
USAF HOSP, SEYMOUR JOHNSON AFB	126734	3345	.0264	0.9777
USAF HOSP, REESE AFB	74348	1961	.0264	0.9768
USAF HOSP, PLATTSBURGH AFB	76445	2012	.0263	0.9748
USAF HOSP, UPPER HEYFORD	88324	2324	.0263	0.9748
USAF HOSP, BEALE AFB	98442	2591	.0263	0.9748
USAF HOSP, MAXWELL AFB	102472	2697	.0263	0.9747
USAF CLINIC, SPANGDAHLEM	44686	1176	.0263	0.9743
USAF CLINIC, BENTWATERS	61259	1611	.0263	0.9741
USAF HOSP, BARKSDALE AFB	194253	5099	.0263	0.9723
USAF HOSP, GEORGE AFB	113692	2983	.0262	0.9718
USAF HOSP, WHITEMAN AFB	86092	2258	.0262	0.9712
USAF HOSP, HOLLOMAN AFB	136059	3567	.0262	0.9710
USAF HOSP, GRAND FORKS AFB	112229	2939	.0262	0.9698
USAF HOSP, MALMSTROM AFB	87363	2287	.0262	0.9698
USAF HOSP, MISAWA	64612	1689	.0261	0.9683

TABLE C-3 (CONT'D)  
AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
LOWRY USAF/HDC	46394	1213	.0261	0.9682
USAF HOSP, LITTLE ROCK AFB	165664	4326	.0261	0.9672
USAF HOSP, COLUMBUS AFB	70573	1840	.0261	0.9657
USAF HOSP, ROBINS AFB	103983	2706	.0260	0.9638
USAF HOSP, GRIFFISS AFB	82810	2153	.0260	0.9630
USAF HOSP, WURTSMITH AFB	75008	1949	.0260	0.9623
USAF HOSP, HAHN	80495	2089	.0260	0.9612
USAF CLINIC, ZWEIBRUECKEN	48597	1261	.0259	0.9611
USAF HOSP, TORREJON	97956	2529	.0258	0.9561
USAF CLINIC, RAMSTEIN	121709	3140	.0258	0.9555
PETERSON USAF/HDC	104177	2685	.0258	0.9545
USAF HOSP, MCCONNELL AFB	77604	1999	.0258	0.9542
USAF HOSP, WILLIAMS AFB	115956	2979	.0257	0.9515
USAF HOSP, OFFUTT AFB	297490	7633	.0257	0.9503
MCGUIRE USAF/HDC	42969	1101	.0256	0.9487
HANSCOM USAF/HDC	45550	1167	.0256	0.9486
USAF HOSP, LAJES AZORES	28289	723	.0256	0.9465
USAF HOSP, LAUGHLIN AFB	63882	1630	.0255	0.9448
CHARLESTON USAF/HDC	66627	1699	.0255	0.9443
USAF CLINIC, CHICKSANDS	25201	642	.0255	0.9443
BROOKS USAF/HDC	26151	667	.0255	0.9442
USAF HOSP, KIRTLAND AFB	154960	3950	.0255	0.9442
EIELSON USAF/HDC	52812	1342	.0254	0.9411
USAF CLINIC, RHEIN-MAIN	62100	1577	.0254	0.9405
POPE USAF/HDC	59614	1512	.0254	0.9393
USAF HOSP, TINKER AFB	214776	5422	.0252	0.9350
USAF CLINIC, AVIANO	32843	828	.0252	0.9338

TABLE C-3 (CONT'D)  
AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF HOSP, DYESS AFB	138165	3481	.0252	0.9331
KELLY USAF/HDC	44891	1129	.0252	0.9319
MCCLELLAN USAF/HDC	94601	2376	.0251	0.9304
HICKAM USAF/HC	124071	3114	.0251	0.9296
USAF CLINIC, ALCONBURY	51262	1286	.0251	0.9295
USAF CLINIC, SAN VITO	25528	641	.0251	0.9294
USAF HOSP, K I SAWYER AFB	76351	1915	.0251	0.9289
MCCHORD USAF/HDC	32357	811	.0251	0.9281
USAF HOSP, GRISSOM AFB	66140	1651	.0250	0.9245
VANCE USAF/HDC	29232	729	.0250	0.9242
GOODFELLOW USAF/HDC	47036	1155	.0246	0.9099
RANDOLPH USAF/HDC	126652	2967	.0234	0.8677
LOS ANGELES USAF/HDC	34667	807	.0233	0.8620
NORTON USAF/HDC	110612	2538	.0229	0.8499
U.S. AIR FORCE	14575568	390029		
MHSS GRAND TOTAL	44271462	1195278		

TABLE C-4  
DENTAL AWU PRODUCTION  
U.S. ARMY  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
MEDDAC BREMERHAVEN	129911	818	.0063	1.1708
EISENHOWER ARMY MEDICAL CENTER	667023	4011	.0060	1.1176
MEDDAC FT WAINWRIGHT	400172	2284	.0057	1.0605
MEDDAC FT BRAGG	1385303	7783	.0056	1.0440
MEDDAC REDSTONE ARSENAL	126118	707	.0056	1.0414
MEDDAC PANAMA	238253	1334	.0056	1.0406
MEDDAC FT MCCLELLAN	306553	1714	.0056	1.0392
MEDDAC FT EUSTIS	286063	1598	.0056	1.0382
FITZSIMONS ARMY MEDICAL CENTER	104726	578	.0055	1.0251
MEDDAC FT DIX	232923	1284	.0055	1.0244
MEDDAC FT LEE	204053	1124	.0055	1.0235
MEDDAC FT SILL	682206	3746	.0055	1.0206
MEDDAC FT CAMPBELL	823458	4519	.0055	1.0198
MEDDAC FT HUACHUCA	284083	1558	.0055	1.0195
18TH MEDCOM HOSPITAL	612482	3357	.0055	1.0184
FRANKFURT ARMY MEDICAL CENTER	1267243	6935	.0055	1.0170
MEDDAC FT DEVENS	265873	1454	.0055	1.0166
MEDDAC BAD CANNSTATT	582080	3144	.0054	1.0038
MEDDAC FT STEWART	551010	2969	.0054	1.0014
MEDDAC FT IRWIN	97983	526	.0054	0.9978
MEDDAC FT HOOD	1443944	7740	.0054	0.9962
MEDDAC VICENZA	142468	761	.0053	0.9924
MEDDAC FT CARSON	797534	4252	.0053	0.9907
MADIGAN ARMY MEDICAL CENTER	897478	4775	.0053	0.9887



TABLE C-4 (CONT'D)  
DENTAL AWU PRODUCTION  
U.S. ARMY  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
MEDDAC FT RUCKER	270559	1439	.0053	0.9882
130TH STATION HOSPITAL	599660	3184	.0053	0.9867
MEDDAC WEST POINT	196699	1044	.0053	0.9865
MEDDAC FT BENNING	840839	4461	.0053	0.9860
USA HOSP LANDSTUHL	665599	3531	.0053	0.9857
WALTER REED ARMY MEDICAL CENTER	664447	3503	.0053	0.9796
MEDDAC FT LEONARD WOOD	530152	2790	.0053	0.9780
MEDDAC FT JACKSON	441984	2322	.0053	0.9764
MEDDAC FT KNOX	1028352	5398	.0052	0.9755
MEDDAC FT ORD	588627	3075	.0052	0.9709
MEDDAC JAPAN	61083	319	.0052	0.9704
MEDDAC FT MEADE	631207	3285	.0052	0.9672
TRIPLER ARMY MEDICAL CENTER	710961	3690	.0052	0.9644
MEDDAC FT MONMOUTH	129895	674	.0052	0.9638
USA MEDDAC NUERNBERG	750246	3889	.0052	0.9634
USA MEDDAC WUERZBURG	582467	3016	.0052	0.9622
MEDDAC FT POLK	480553	2464	.0051	0.9529
MEDDAC FT LEAVENWORTH	250903	1284	.0051	0.9512
MEDDAC FT BELVOIR	295914	1513	.0051	0.9504
MEDDAC FT RILEY	723623	3689	.0051	0.9475
LETTERMAN ARMY MEDICAL CENTER	255929	1279	.0050	0.9288
MEDDAC AUGSBURG	402865	1993	.0049	0.9193
WILLIAM BEAUMONT ARMY MED CENTER	913455	4416	.0048	0.8984
BROOKE ARMY MEDICAL CENTER	521875	2461	.0047	0.8763
-----	-----	-----	-----	-----
U.S. ARMY TOTAL	25066834	133690		

TABLE C-5

## DENTAL AWU PRODUCTION

## U.S. NAVY

FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
NAVAL HOSPITAL PHILADELPHIA	20568	130	.0063	1.1708
NAVAL HOSPITAL ROOSEVELT ROADS	19601	123	.0063	1.1708
NAVAL HOSPITAL CAMP LEJEUNE	30851	194	.0063	1.1708
NAVAL HOSPITAL BREMERTON	14601	92	.0063	1.1708
NAVAL HOSPITAL OKINAWA	18684	118	.0063	1.1708
NAVAL HOSPITAL GUAM	21636	136	.0063	1.1708
NAVAL HOSPITAL BEAUFORT	23167	146	.0063	1.1708
NAVAL HOSPITAL MILLINGTON	63970	403	.0063	1.1708
NAVAL HOSPITAL NEWPORT	10623	67	.0063	1.1708
NAVAL HOSPITAL JACKSONVILLE	19442	122	.0063	1.1708
NAVAL HOSPITAL SUBIC BAY	18748	118	.0063	1.1708
NAVAL HOSPITAL PENSACOLA	23615	149	.0063	1.1708
NAVAL HOSPITAL CHERRY POINT	13874	87	.0063	1.1708
NAVAL HOSPITAL CHARLESTON	23504	148	.0063	1.1708
NAVAL HOSPITAL ORLANDO	23715	149	.0063	1.1708
NAVAL HOSPITAL GROTON	7594	48	.0063	1.1708
NAVAL HOSPITAL BETHESDA	62096	389	.0063	1.1648
NAVAL DENTAL CLINIC SAN DIEGO	2098659	12756	.0061	1.1296
NAVAL DENTAL CLINIC ORLANDO	981745	5696	.0058	1.0782
NAVAL DENTAL CLINIC	574379	3265	.0057	1.0564
NAVAL DENTAL CLINIC PENSACOLA	841557	4745	.0056	1.0472
NAVAL DENTAL CLINIC GUAM	289515	1626	.0056	1.0438
NAVAL DENTAL CLINIC PARRIS ISLAND	717572	4005	.0056	1.0371
NAVAL DENTAL CLINIC LONG BEACH	394828	2190	.0055	1.0309

TABLE C-5 (CONT'D)  
DENTAL AWU PRODUCTION  
U.S. NAVY  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
NAVAL DENTAL CLINIC SUBIC BAY	292300	1617	.0055	1.0281
NAVAL DENTAL CLINIC PEARL HARBOR	658211	3622	.0055	1.0226
NAVAL DENTAL CLINIC NAPLES	502680	2735	.0054	1.0110
NAVAL DENTAL CLINIC CHARLESTON	341373	1856	.0054	1.0105
NAVAL DENTAL CLINIC GLAKES	1630558	8863	.0054	1.0101
NAVAL DENTAL CLINIC JAXS	604677	3284	.0054	1.0094
NAVAL DENTAL CLINIC YOKOSUKA	339843	1827	.0054	0.9992
NAVAL HOSPITAL SAN DIEGO	174626	936	.0054	0.9961
NAVAL HOSPITAL LONG BEACH	35614	190	.0053	0.9931
NAVAL HOSPITAL GREAT LAKES	91128	486	.0053	0.9914
NAVAL DENTAL CLINIC BREMERTON	551578	2939	.0053	0.9901
NAVAL HOSPITAL CAMP PENDLETON	70283	372	.0053	0.9838
NAVAL DENTAL CLINIC NEWPORT	622198	3266	.0052	0.9756
NAVAL DENTAL CLINIC OKINAWA	325930	1703	.0052	0.9709
NAVAL DENTAL CLINIC BETHESDA	1115585	5750	.0052	0.9578
NAVAL DENTAL CLINIC CAMP PENDLTON	789045	4008	.0051	0.9441
NAVAL DENTAL CLINIC SAN FRANCISCO	785253	3955	.0050	0.9360
NAVAL DENTAL CLINIC NORFOLK	1762826	8826	.0050	0.9304
NAVAL HOSPITAL PORTSMOUTH	147702	733	.0050	0.9225
NAVAL HOSPITAL OAKLAND	120051	587	.0049	0.9083
NAVAL DENTAL CLINIC PHILADELPHIA	249087	1150	.0046	0.8576
NAVAL DENTAL CLINIC ROOSEVELT ROADS	192067	833	.0043	0.8060
U.S. NAVY	17717159	96440		

TABLE C-6  
DENTAL AWU PRODUCTION

U.S. AIR FORCE

FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF CLINIC, FAIRFORD	23329	147	.0063	1.1708
USAF CLINIC, GREENHAM COMMON	45523	282	.0062	1.1511
USAF CLINIC, SEMBACH	83366	504	.0060	1.1233
USAF HOSP, CANNON AFB	101183	602	.0060	1.1064
USAF CLINIC, ZARAGOZA	38937	231	.0059	1.1033
USAF CLINIC, NEW AMSTERDAM	51517	306	.0059	1.1020
USAF CLINIC, ALCONBURY	83270	493	.0059	1.1009
USAF CLINIC, SAN VITO	48481	287	.0059	1.1006
USAF HOSP, ENGLAND AFB	95835	565	.0059	1.0964
USAF HOSP, BITBURG	141637	834	.0059	1.0944
USAF HOSP, GRIFFISS AFB	124387	731	.0059	1.0926
USAF HOSP, MOODY AFB	76118	446	.0059	1.0883
USAF HOSP, MYRTLE BEACH AFB	89533	524	.0059	1.0879
USAF HOSP, HOMESTEAD AFB	171205	1001	.0058	1.0866
USAF HOSP, NELLIS AFB	204414	1194	.0058	1.0856
GOODFELLOW USAF/HDC	66608	389	.0058	1.0851
USAF HOSP, BLYTHEVILLE AFB	77959	455	.0058	1.0849
USAF CLINIC, RHEIN-MAIN	107121	625	.0058	1.0843
USAF HOSP, DOVER AFB	162655	943	.0058	1.0770
USAF HOSP, DYESS AFB	136625	790	.0058	1.0743
USAF HOSP, MALMSTROM AFB	152882	883	.0058	1.0731
POPE USAF/HDC	128350	741	.0058	1.0727
USAF CLINIC, BENTWATERS	140038	808	.0058	1.0727
USAF HOSP, ALTUS AFB	55990	323	.0058	1.0719

TABLE C-6 (CONT'D)  
DENTAL AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF CLINIC, AVIANO	58238	335	.0058	1.0698
MCGUIRE USAF/HDC	169305	974	.0058	1.0692
USAF HOSP, OSAN	131783	757	.0057	1.0677
USAF HOSP, GRISSOM AFB	79542	457	.0057	1.0675
USAF HOSP, ELLSWORTH AFB	170062	975	.0057	1.0656
USAF HOSP, HAHN	152823	874	.0057	1.0625
USAF HOSP, KUNSAN	158854	908	.0057	1.0624
USAF CLINIC, ZWEIBRUECKEN	74425	425	.0057	1.0611
USAF HOSP, VANDENBERG AFB	142487	813	.0057	1.0604
USAF HOSP, REESE AFB	69537	397	.0057	1.0604
USAF HOSP, GRAND FORKS AFB	140298	800	.0057	1.0591
USAF HOSP, BEALE AFB	135883	774	.0057	1.0590
USAF HOSP, LAJES AZORES	45334	258	.0057	1.0580
BROOKS USAF/HDC	39447	224	.0057	1.0568
HANSCOM USAF/HDC	74738	425	.0057	1.0566
USAF HOSP, PLATTSBURGH AFB	107254	610	.0057	1.0563
USAF HOSP, EDWARDS AFB	149129	848	.0057	1.0561
USAF HOSP, LAUGHLIN AFB	65082	369	.0057	1.0533
LOS ANGELES USAF/HDC	46694	265	.0057	1.0527
USAF HOSP, F E WARREN AFB	103044	584	.0057	1.0523
TUSLOG DET 119, IZMIR	42957	243	.0057	1.0522
USAF HOSP, BERGSTROM AFB	163063	921	.0057	1.0500
KELLY USAF/HDC	138441	782	.0056	1.0497
USAF HOSP, CLARK	447961	2524	.0056	1.0472
USAF HOSP, UPPER HEYFORD	201690	1136	.0056	1.0464
USAF HOSP, WILLIAMS	104807	590	.0056	1.0454
USAF HOSP, INCIRLIK	66806	376	.0056	1.0453

TABLE C-6 (CONT'D)  
DENTAL AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF HOSP, IRAKLION CRETE	42107	237	.0056	1.0451
USAF HOSP, K I SAWYER AFB	167169	940	.0056	1.0446
USAF HOSP, WURTSMITH AFB	89349	502	.0056	1.0440
USAF HOSP, LANGLEY AFB	280335	1574	.0056	1.0433
USAF HOSP, HOLLOMAN AFB	147695	829	.0056	1.0427
USAF CLINIC, CHICKSANDS	57123	320	.0056	1.0417
USAF REG HOSP, CARSWELL AFB	173684	972	.0056	1.0403
USAF CLINIC, CANEL ZONE	94008	526	.0056	1.0392
USAF HOSP, FAIRCHILD AFB	131583	735	.0056	1.0375
USAF HOSP, CASTLE AFB	173145	964	.0056	1.0348
USAF CLINIC, ANDERSON GUAM	139050	774	.0056	1.0347
USAF HOSP, WHITEMAN AFB	99222	552	.0056	1.0344
CHARLESTON USAF/HDC	124178	690	.0056	1.0325
USAF CLINIC, RAMSTEIN	370726	2057	.0055	1.0310
MCCLELLAN USAF/HDC	122893	682	.0055	1.0307
USAF HOSP, SEYMOUR JOHNSON AFB	153347	850	.0055	1.0301
MED CENTER, WRIGHT-PATTERSON AFB	271324	1503	.0055	1.0295
USAF HOSP, CHANUTE AFB	227604	1260	.0055	1.0290
USAF HOSP, TINKER AFB	217612	1104	.0055	1.0284
USAF HOSP, LAKENHEATH	229488	1270	.0055	1.0281
NORTON USAF/HDC	160690	889	.0055	1.0278
SHAW REG HOSP, SHAW AFB	168125	929	.0055	1.0269
USAF HOSP, LUKE AFB	194249	1073	.0055	1.0269
USAF HOSP, DAVIS-MONTHON AFB	210196	1161	.0055	1.0266
USAF HOSP, MATHER AFB	167935	927	.0055	1.0260
USAF HOSP, KIRTLAND AFB	157891	871	.0055	1.0248
HICKAM USAF/HC	220111	1212	.0055	1.0233

TABLE C-6 (CONT'D)  
DENTAL AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
RANDOLPH USAF/HDC	191543	1053	.0055	1.0215
LOWRY USAF/HDC	233549	1283	.0055	1.0209
USAF HOSP, MOUNTAIN HOME AFB	112506	617	.0055	1.0189
USAF HOSP, MAXWELL AFB	106517	584	.0055	1.0187
USAF HOSP, MISAWA	137371	753	.0055	1.0186
USAF HOSP, LORING AFB	146972	805	.0055	1.0183
MINOT REG HOSP, MINOT AFB	167208	916	.0055	1.0180
USAF HOSP, MCCONNELL AFB	117364	642	.0055	1.0158
USAF HOSP, TORREJON	146882	802	.0055	1.0144
USAF HOSP, COLUMBUS AFB	88984	486	.0055	1.0143
USAF CLINIC, SPANGDAHLEM	121672	663	.0055	1.0130
USAF REG HOSP, EGLIN AFB	447041	2436	.0054	1.0127
USAF CLINIC, KADENA	358101	1951	.0054	1.0125
MALCOLM GROW MED CENTER, ANDREWS AFB	490563	2669	.0054	1.0110
MACDILL REG HOSP, MACDILL AFB	202054	1098	.0054	1.0100
USAF HOSP, WIESBADEN	282058	1528	.0054	1.0066
USAF HOSP, PATRICK AFB	152330	822	.0054	1.0030
USAF HOSP, ELMENDORF AFB	318854	1718	.0054	1.0011
MCCHORD USAF/HDC	165139	888	.0054	0.9990
E BERGQUIST HOSP, OFFUTT AFB	379403	2039	.0054	0.9989
USAF HOSP, HILL AFB	158324	851	.0054	0.9987
KEESLER MED CENTER, KEESLER AFB	399162	2143	.0054	0.9978
USAF HOSP, ATHENS	76169	408	.0054	0.9946
SCOTT MED CENTER, SCOTT AFB	278631	1488	.0053	0.9924
USAF HOSP, PEASE AFB	135407	722	.0053	0.9907
TUSLOG DET 37, ANKARA	26958	143	.0053	0.9880
USAF REG HOSP, SHEPPARD AFB	300899	1599	.0053	0.9873

TABLE C-6 (CONT'D)  
DENTAL AWU PRODUCTION  
U.S. AIR FORCE  
FISCAL YEAR 1985

FACILITY*	TOTAL AMBULATORY VISITS	TOTAL AWUS	AWUS PER AMBULATORY VISIT	FACILITY RESOURCE INTENSITY INDEX
USAF HOSP, ROBINS AFB	172831	915	.0053	0.9838
USAF HOSP, GEORGE AFB	165424	871	.0053	0.9782
USAF HOSP, TYNDALL AFB	144451	758	.0052	0.9752
USAF ACADEMY HOSP	231072	1203	.0052	0.9672
USAF HOSP, YOKOTA	294743	1523	.0052	0.9604
USAF HOSP, LITTLE ROCK AFB	174210	900	.0052	0.9602
EIELSON USAF/HDC	167114	863	.0052	0.9599
GRANT MED CENTER, TRAVIS AFB	349169	1773	.0051	0.9436
PETERSON USAF/HDC	148094	732	.0049	0.9181
WILFORD HALL MED CENTER, LACKLAND AFB	894311	4308	.0048	0.8951
VANCE USAF/HDC	40077	191	.0048	0.8834
MARCH REG HOSP, MARCH AFB	313081	1294	.0041	0.7681
USAF HOSP, BARKSDALE AFB	836706	2762	.0033	0.6135
	-----	-----		
U.S. AIR FORCE TOTAL	19950430	107451		
	=====	=====		
MHSS GRAND TOTAL	62734423	337581		

\*Some facility names have been altered to achieve uniformity.



APPENDIX D

PLOTS OF SUBACCOUNT  
AMBULATORY WORK UNIT RESOURCE INTENSITY  
BY DIAGNOSIS RELATED GROUP CASE COMPLEXITY  
FISCAL YEAR 1985

FIGURE D-1  
 AWU RESOURCE INTENSITY  
 BY DRG CASE COMPLEXITY  
 U.S. ARMY  
 FISCAL YEAR 1985

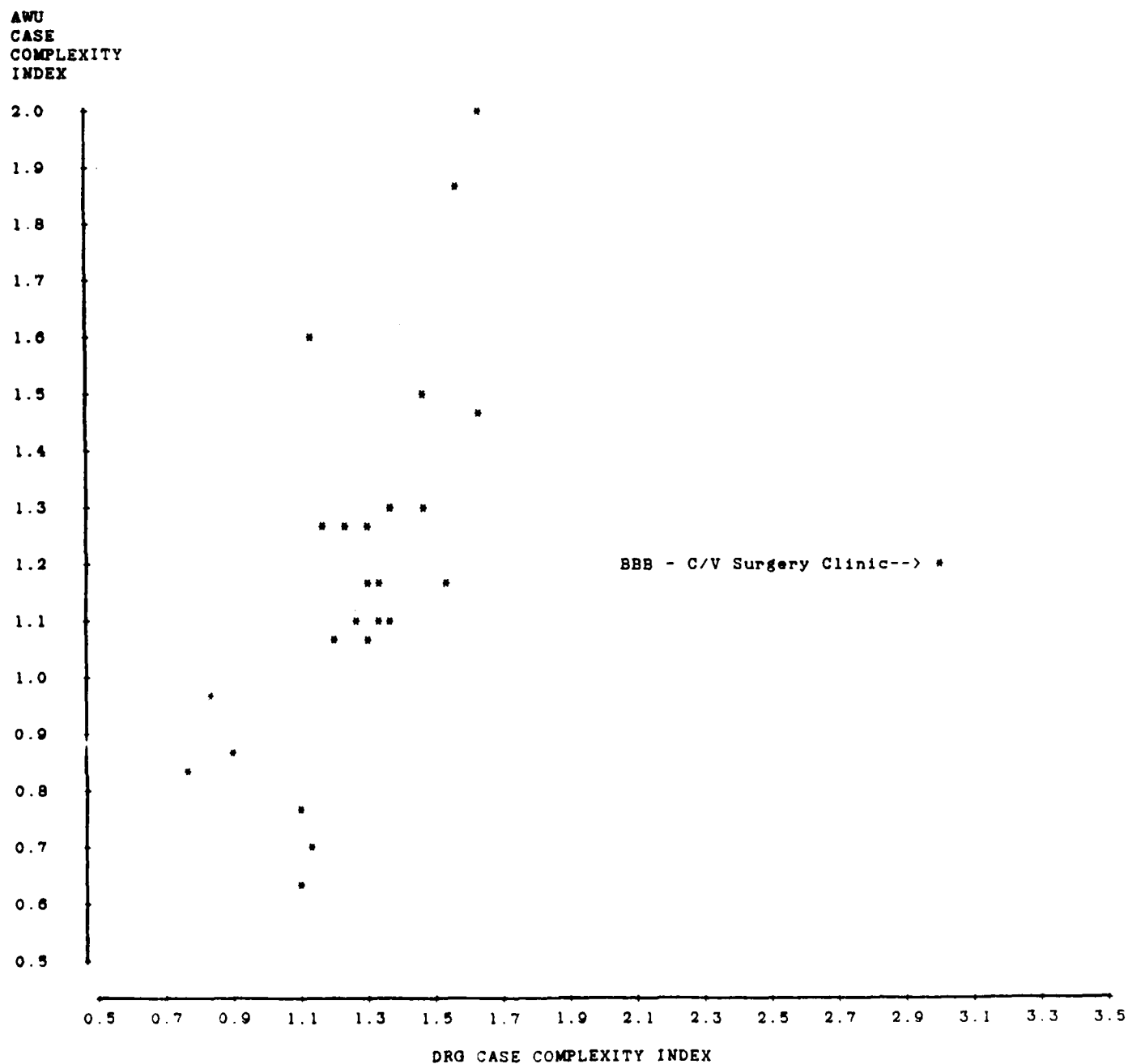


FIGURE D-2  
 AWU RESOURCE INTENSITY\*<sup>1</sup>  
 BY DRG CASE COMPLEXITY - REGRESSION EQUATION  
 U.S. ARMY  
 FISCAL YEAR 1985

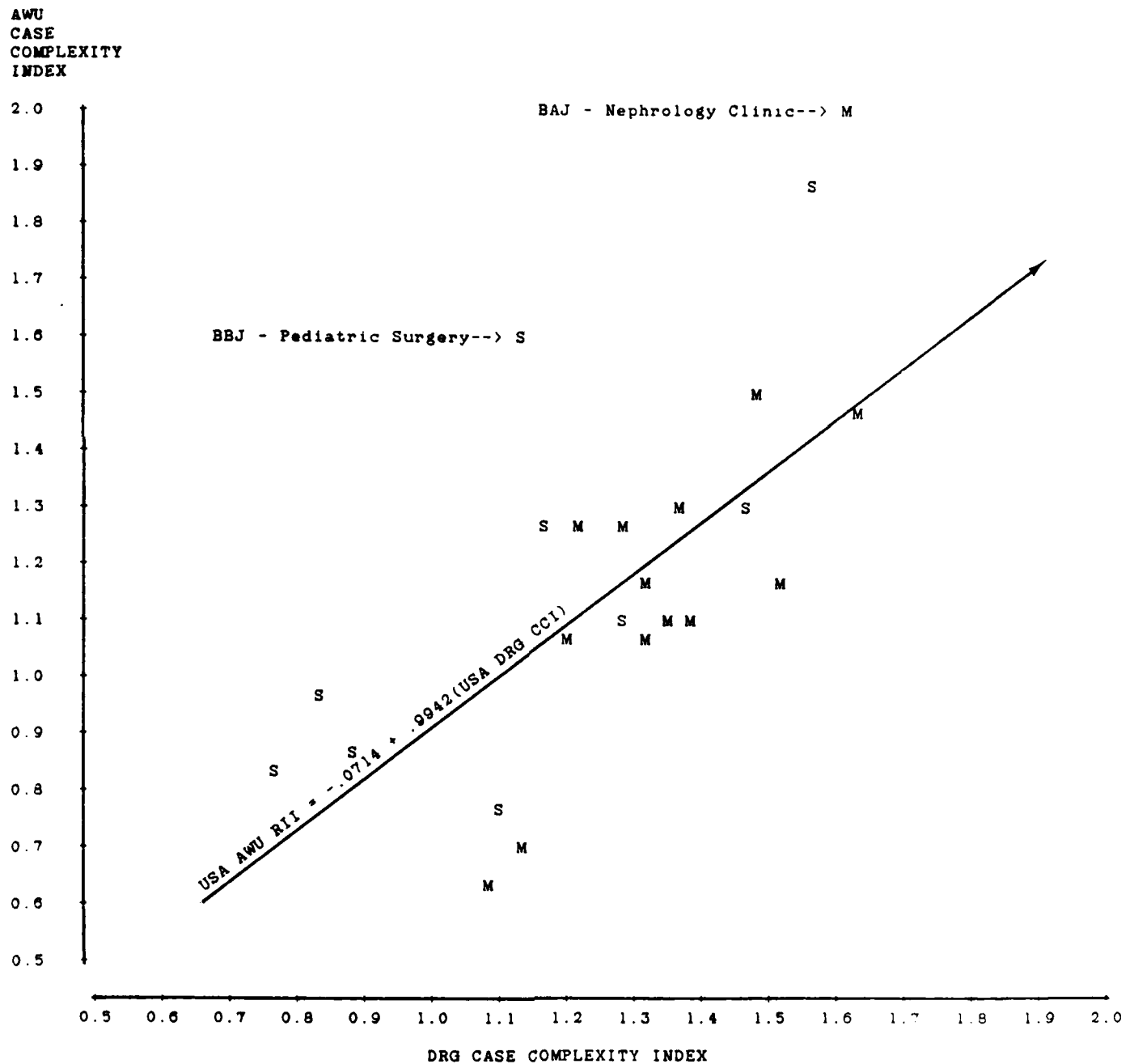


FIGURE D-3  
 AWU RESOURCE INTENSITY  
 BY DRG CASE COMPLEXITY  
 U.S. NAVY  
 FISCAL YEAR 1985

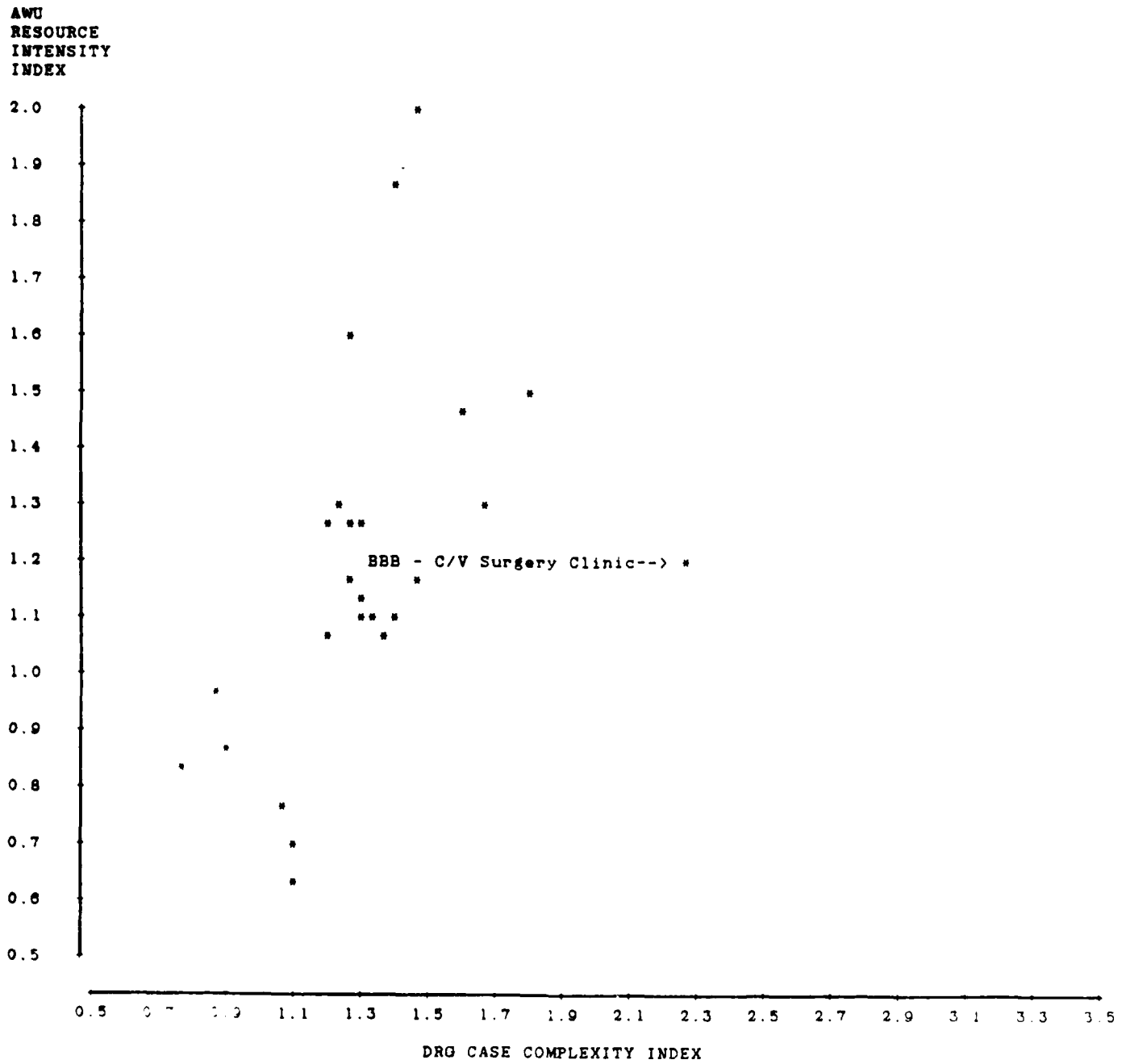
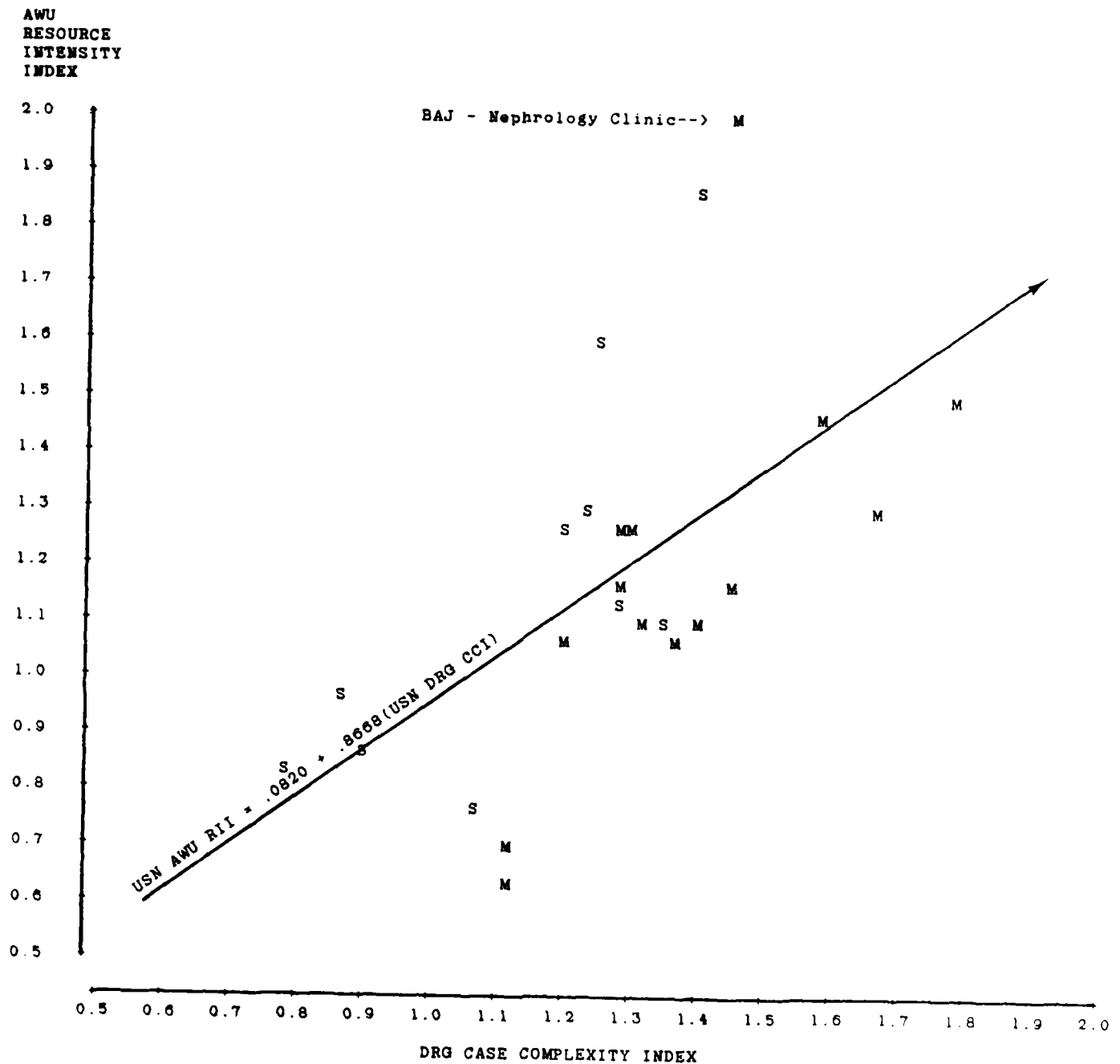


FIGURE D-4  
 AWU RESOURCE INTENSITY\*<sup>1</sup>  
 BY DRG CASE COMPLEXITY - REGRESSION EQUATION  
 U.S. NAVY  
 FISCAL YEAR 1985



\*M = Medical care summary account. S = Surgical care summary account.

<sup>1</sup>BBB - Cardiovascular Surgery Clinic eliminated.

FIGURE D-5  
 AWU RESOURCE INTENSITY  
 BY DRG CASE COMPLEXITY  
 U.S. AIR FORCE  
 FISCAL YEAR 1985

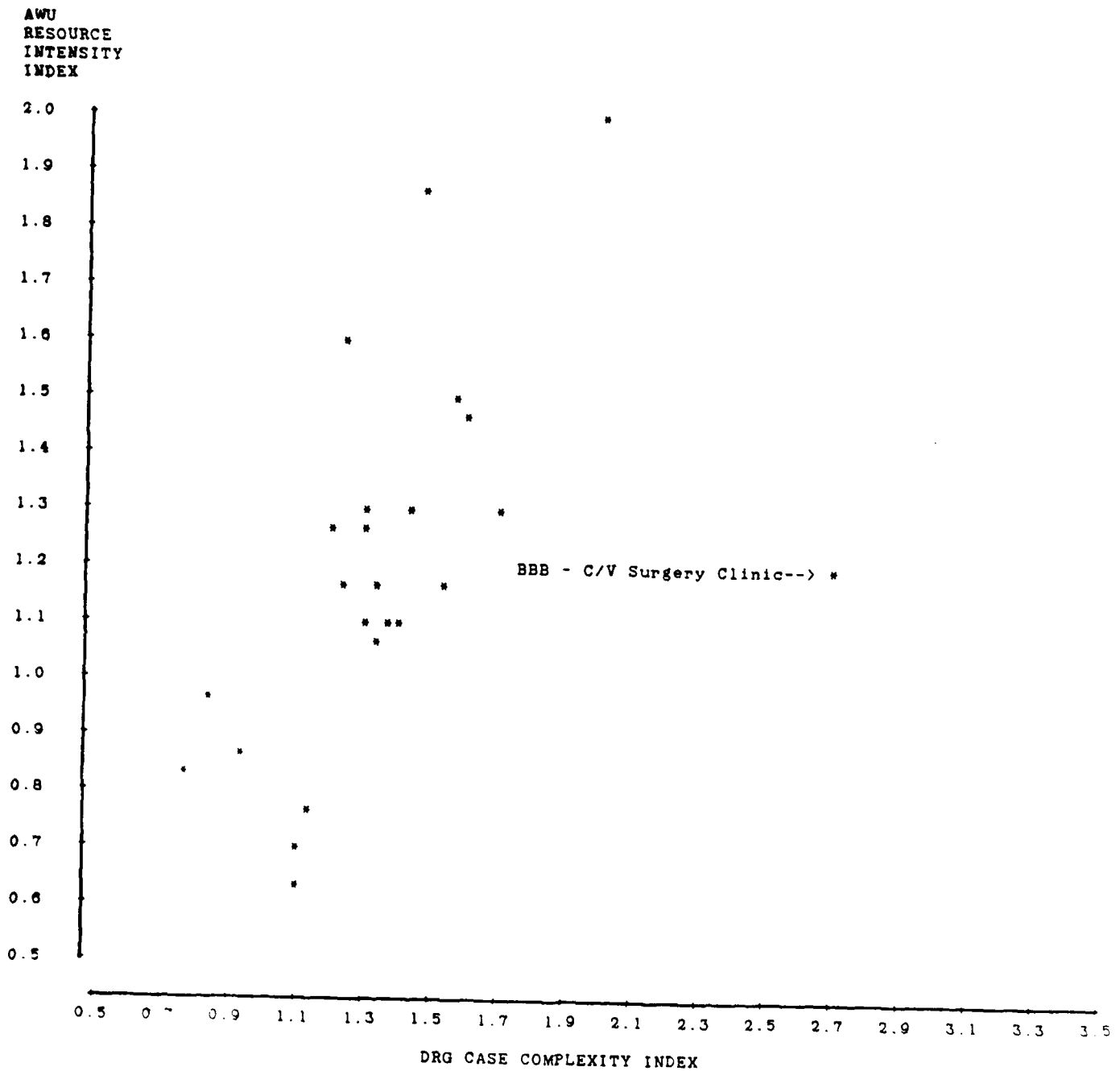
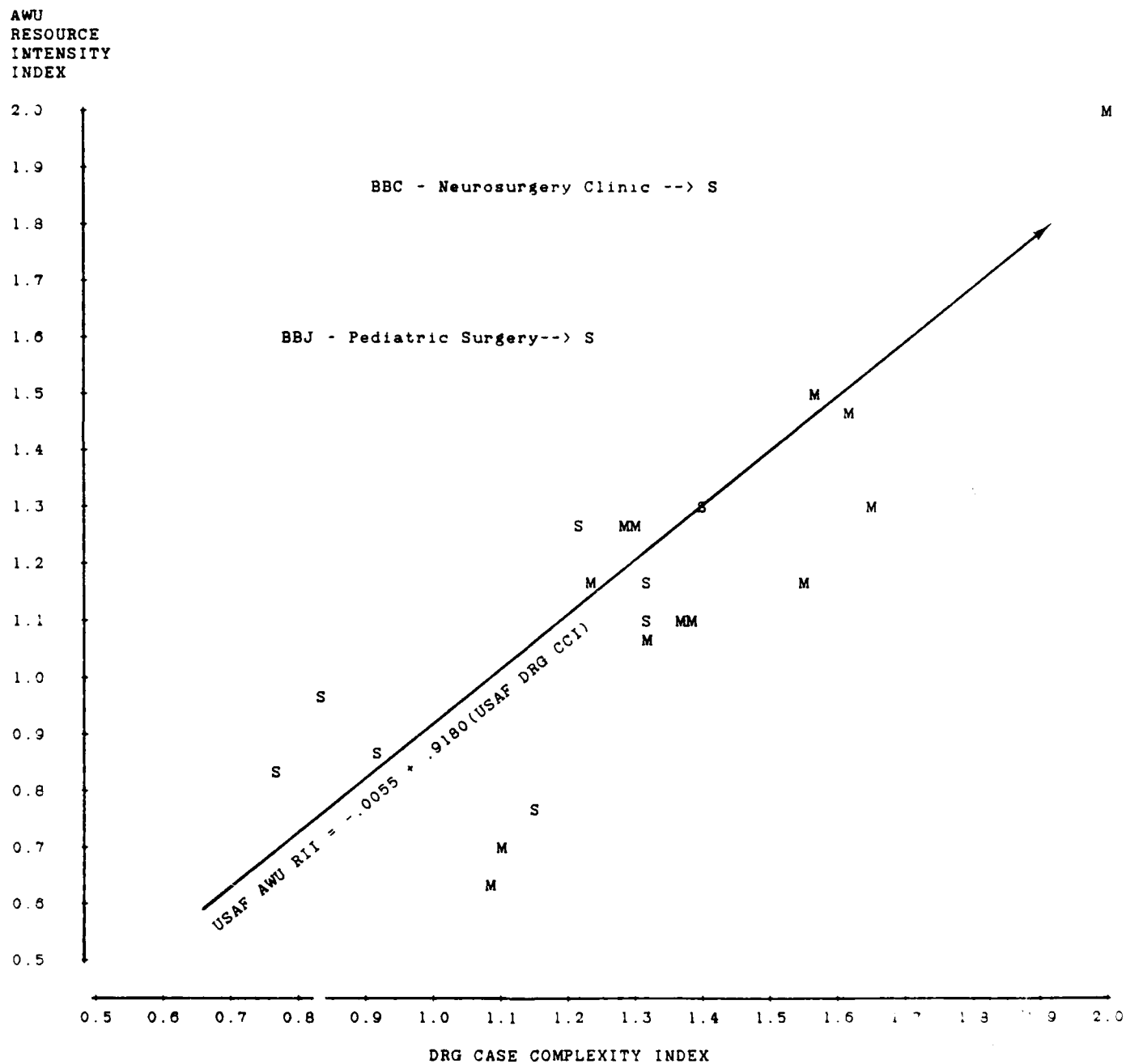


FIGURE D-6  
 AWU RESOURCE INTENSITY\*<sup>1</sup>  
 BY DRG CASE COMPLEXITY - REGRESSION EQUATION  
 U.S. AIR FORCE  
 FISCAL YEAR 1985



\*M = Medical care summary account. S = Surgical care summary account.

<sup>1</sup>BBB - Cardiovascular Surgery Clinic eliminated.

FIGURE D-7  
 AWU RESOURCE INTENSITY  
 BY DRG CASE COMPLEXITY  
 MILITARY HEALTH SERVICE SYSTEM  
 FISCAL YEAR 1985

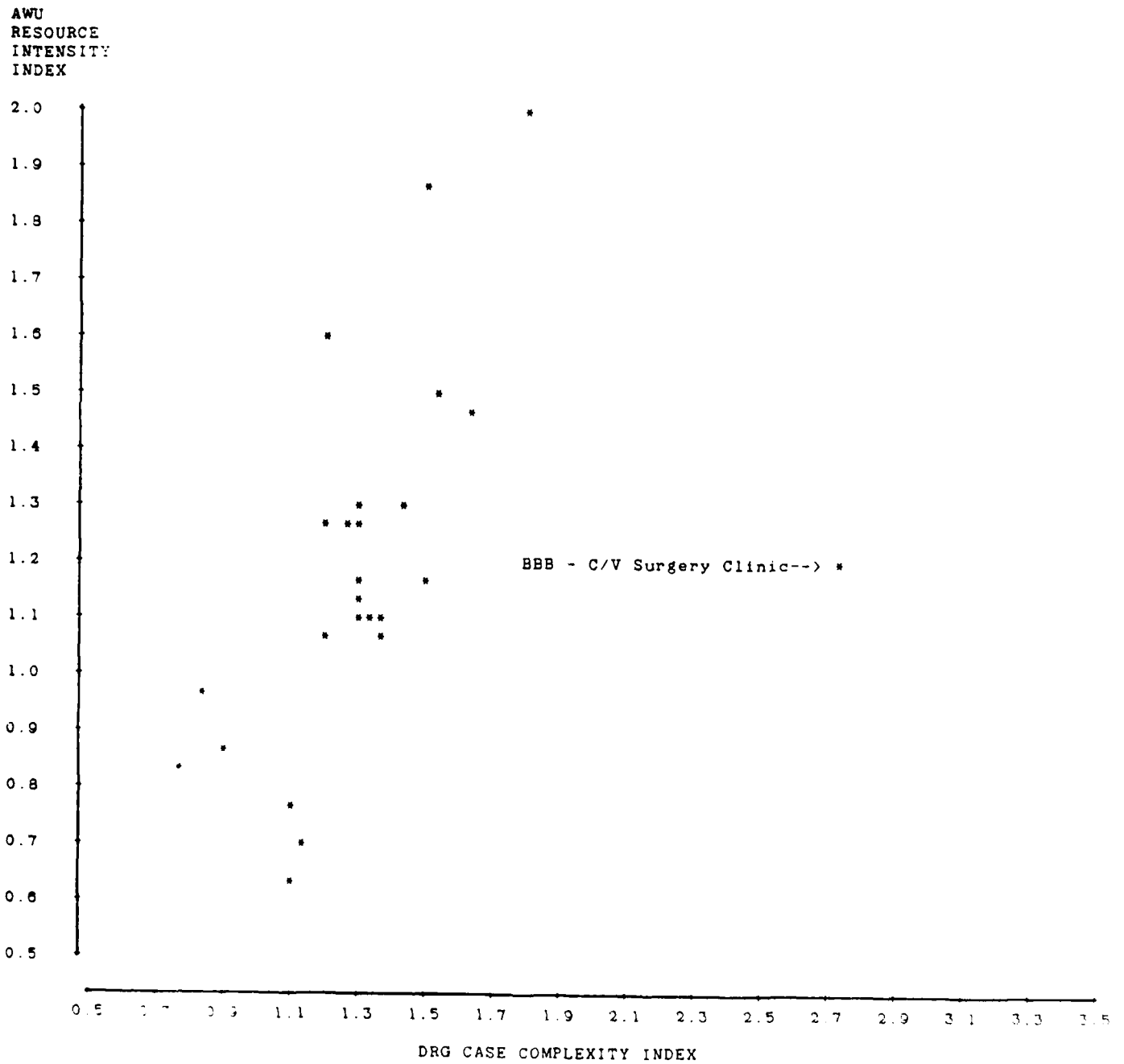
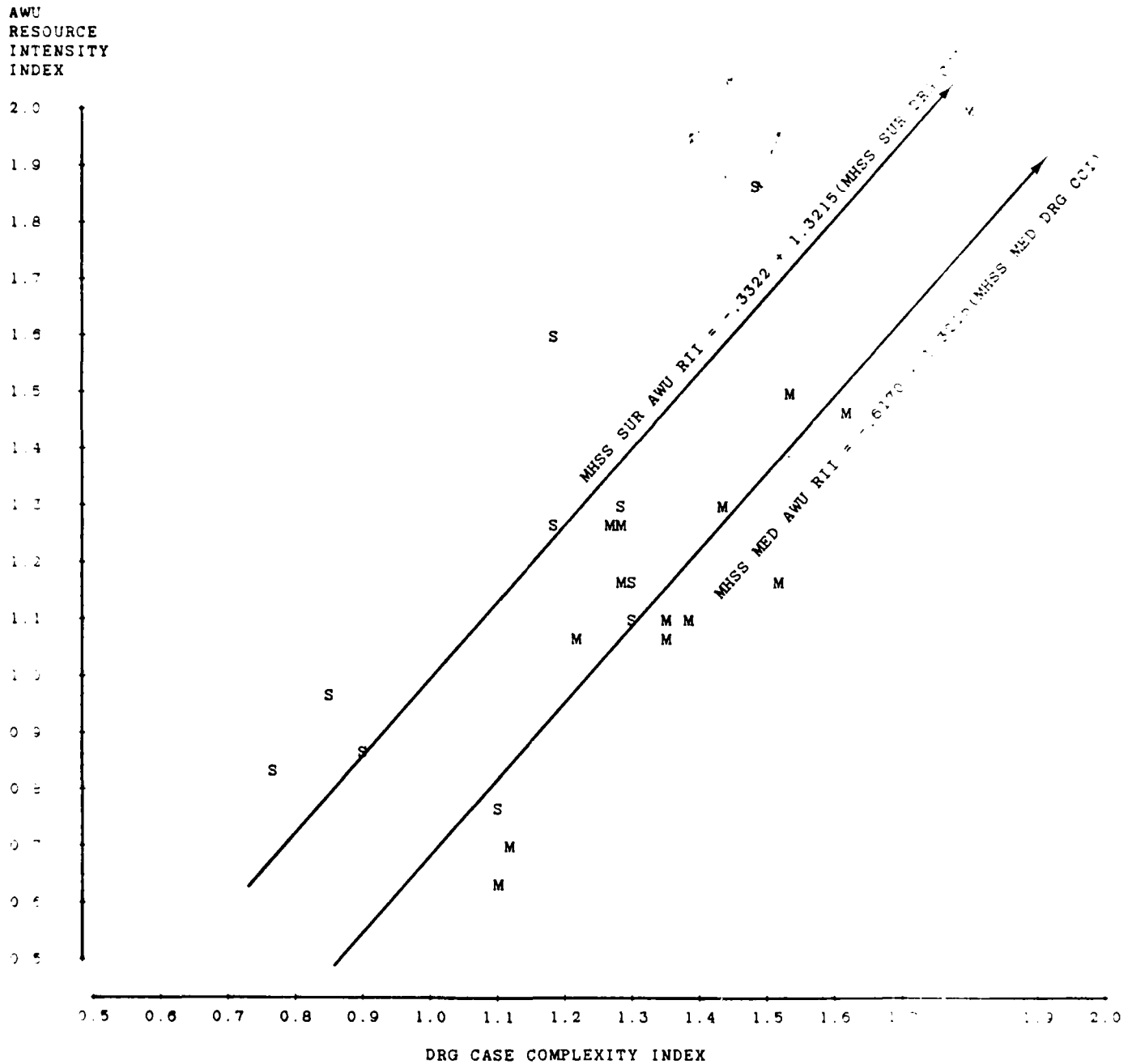




FIGURE D-8  
 AWU RESOURCE INTENSITY\*<sup>1</sup>  
 BY DRG CASE COMPLEXITY - REGRESSION EQUATIONS  
 MILITARY HEALTH SERVICE SYSTEM  
 FISCAL YEAR 1985



\*M = Medical care summary account. S = Surgical care summary account.

<sup>1</sup>BBB - Cardiovascular Surgery Clinic eliminated.

APPENDIX E

AMBULATORY COST FACTOR AND  
WORK UNIT CALCULATIONS

AMBULATORY COST FACTOR AND  
WORK UNIT CALCULATIONS

For each ambulatory care subaccount the following data is included:

- (1) Table 1 presents initial record screen failures. Criteria for failure is discussed in Chapter 2.
- (2) Facility subaccounts eliminated due to ambulatory visit cost distribution screens are presented in Table 2.
- (3) Parameter estimates, skewness coefficients, and skewness probability values are presented in Table 3. Parameter estimates are listed until skewness coefficient is no longer significant.
- (4) Table 4 presents the parameter estimate selected as cost factor for calculation of the AWU.
- (5) Facility names are listed as they appeared in MEPRS PCOM files with little no modification and differ slightly from Appendix C.

TABLE BAA-1

## INITIAL RECORD SCREEN FAILURES

## BAA - INTERNAL MEDICINE CLINIC

NO FACILITIES FAILED

TABLE BAA-2

## DISTRIBUTION SCREEN FAILURES

## BAA - INTERNAL MEDICINE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MADIGAN ARMY MEDICAL CENTER	\$596,837	21348	\$27.96	-2.31
LETTERMAN ARMY MEDICAL CENTER	\$893,057	38126	\$23.42	-2.75
NAVAL HOSPITAL CORPUS CHRISTI	\$605,029	19780	\$30.59	-2.08
NAVAL HOSPITAL BETHESDA MD	\$3,353,986	20350	\$164.82	2.15
NAVAL HOSPITAL LEMOORE	\$66,455	2406	\$27.62	-2.34
USAF CLINIC, KADENA JAPAN	\$22,528	1264	\$17.82	-3.44
USAF HOSP, CANNON AFB	\$92,361	5225	\$17.68	-3.46

TABLE BAA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAA - INTERNAL MEDICINE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	158	\$76.82	\$32.54	\$153.00	0.76421	LT .01
GEOMETRIC MEAN COST (2 S.D.)	158	\$72.66	\$32.54	\$153.00	-.04034	GT .01

TABLE BAA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAA - INTERNAL MEDICINE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	158	\$72.66	.0395

TABLE BAB-1

## INITIAL RECORD SCREEN FAILURES

## BAB - ALLERGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF ACADEMY HOSP	\$119	0
USAF HOSP, PATRICK AFB	\$410	0
USAF HOSP, MOODY AFB	\$116	0

TABLE BAB-2

## DISTRIBUTION SCREEN FAILURES

## BAB - ALLERGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT WAINWRIGHT	\$7,274	53	\$137.25	2.77
WALTER REED ARMY MEDICAL CENTER	\$1,729,424	21712	\$79.69	2.06
13TH MEDCOM HOSPITAL	\$30,586	362	\$84.49	2.14
USAF CLINIC, AVIANO ITALY	\$6,120	66	\$92.88	2.26
USAF HOSP, LAJES AZORES	\$19,812	110	\$180.11	3.12
USAF HOSP, MISAWA JAPAN	\$3,274	33	\$99.21	2.34
USAF HOSP, OSAN KOREA	\$400	192	\$2.08	-2.67

TABLE BAB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAB - ALLERGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	135	\$18.87	\$4.09	\$62.24	1.37175	LT .01
GEOMETRIC MEAN COST (2 S.D.)	135	\$15.19	\$4.09	\$62.24	0.27273	GT .01

TABLE BAB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAB - ALLERGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	135	\$15.19	.0083

TABLE BAC-1

## INITIAL RECORD SCREEN FAILURES

## BAC - CARDIOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF ACADEMY HOSP	\$273	0
USAF HOSP, LUKE AFB	\$0	661

TABLE BAC-2

## DISTRIBUTION SCREEN FAILURES

## BAC - CARDIOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT STEWART	\$22,357	85	\$263.02	2.61
NAVAL HOSPITAL GREAT LAKES	\$434,363	1431	\$303.54	2.89



TABLE BAC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAC - CARDIOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	36	\$66.98	\$30.55	\$148.56	0.80842	GT .01

TABLE BAC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAC - CARDIOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	36	\$66.98	.0364

TABLE BAE-1

## INITIAL RECORD SCREEN FAILURES

## BAE - DIABETIC CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
WILFORD HALL MED CEN, LACKLAND AFB	\$335	0
MEDDAC WEST POINT	\$37	0

TABLE BAE-2

## DISTRIBUTION SCREEN FAILURES

## BAE - DIABETIC CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
NAVAL HOSPITAL GREAT LAKES	\$12,159	1922	\$6.33	-2.52

TABLE BAE-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAE - DIABETIC CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	13	\$49.09	\$17.28	\$92.21	0.52356	GT .01

TABLE BAE-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAE - DIABETIC CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	13	\$49.09	.0267

TABLE BAF-1

INITIAL RECORD SCREEN FAILURES

BAF - ENDOCRINOLOGY CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BAF-2

DISTRIBUTION SCREEN FAILURES

BAF - ENDOCRINOLOGY CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MED CEN, WRIGHT-PATTERSON AFB	\$263,266	486	\$541.70	2.84
MEDDAC FT BRAGG	\$70,352	4930	\$14.27	-2.37

TABLE BAF-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAF - ENDOCRINOLOGY CLINIC  
 FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	22	\$82.22	\$36.27	\$242.83	2.16306	LT .01
GEOMETRIC MEAN COST (2 S.D.)	22	\$73.39	\$36.27	\$242.83	0.73741	GT .01

TABLE BAF-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAF - ENDOCRINOLOGY CLINIC  
 FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	22	\$73.39	.0399

TABLE BAG-1

INITIAL RECORD SCREEN FAILURES  
BAG - GASTROENTEROLOGY CLINIC

NO FACILITIES FAILED

TABLE BAG-2

DISTRIBUTION SCREEN FAILURES  
BAG - GASTROENTEROLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
EISENHOWER ARMY MEDICAL CENTER	\$583,382	4416	\$132.11	2.00
NAVAL HOSPITAL OAKLAND	\$97,413	584	\$166.80	2.61
NAVAL HOSPITAL CAMP PENDLETON	\$25,204	1005	\$25.08	-2.34

TABLE BAG-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAG - GASTROENTEROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	32	\$62.17	\$32.39	\$102.96	0.32808	GT .01

TABLE BAG-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAG - GASTROENTEROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	32	\$62.17	.0338

TABLE BAH-1

INITIAL RECORD SCREEN FAILURES

BAH - HEMATOLOGY CLINIC

NO FACILITIES FAILED

TABLE BAH-2

DISTRIBUTION SCREEN FAILURES

BAH - HEMATOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
BROOKE ARMY MEDICAL CENTER	\$4,890,030	2970	1646.47	2.67



TABLE BAH-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAH - HEMATOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	19	\$113.05	\$12.42	\$394.26	1.79952	LT .01
GEOMETRIC MEAN COST (2 S.D.)	19	\$83.69	\$12.42	\$394.26	-.46250	GT .01

TABLE BAH-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAH - HEMATOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	19	\$83.69	.0455

TABLE BAI-1

## INITIAL RECORD SCREEN FAILURES

## BAI - HYPERTENSION CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
TRIPLER ARMY MEDICAL CENTER	\$430	0

TABLE BAI-2

## DISTRIBUTION SCREEN FAILURES

## BAI - HYPERTENSION CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
WALTER REED ARMY MEDICAL CENTER	\$25,881	41	\$631.24	3.56

TABLE BAI-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAI - HYPERTENSION CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	25	\$48.45	\$12.11	\$108.48	1.25263	LT .01
GEOMETRIC MEAN COST (2 S.D.)	25	\$42.66	\$12.11	\$108.48	0.07086	GT .01

TABLE BAI-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAI - HYPERTENSION CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	25	\$42.66	.0232

TABLE BAJ-1

INITIAL RECORD SCREEN FAILURES

BAJ - NEPHROLOGY CLINIC

NO FACILITIES FAILED

TABLE BAJ-2

DISTRIBUTION SCREEN FAILURES

BAJ - NEPHROLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
USA HOSP LANDSTUHL, GER	\$313,097	825	\$379.51	2.22

TABLE BAJ-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAJ - NEPHROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	19	\$115.74	\$45.82	\$201.57	0.19066	GT .01

TABLE BAJ-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAJ - NEPHROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	19	\$115.74	.0629

TABLE BAK-1

## INITIAL RECORD SCREEN FAILURES

## BAK - NEUROLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC BAD CANNSTATT	\$1,720	0
USAF HOSP, TORREJON SPAIN	\$18	0

TABLE BAK-2

## DISTRIBUTION SCREEN FAILURES

## BAK - NEUROLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT LEONARD WOOD	\$69,413	395	\$175.73	2.23
MEDDAC FT DEVENS	\$7,127	34	\$209.62	2.64
FRANKFURT ARMY MEDICAL CENTER	\$26,357	1032	\$25.54	-2.33

TABLE BAK-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAK - NEUROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	51	\$71.43	\$32.47	\$151.88	1.08969	LT .01
GEOMETRIC MEAN COST (2 S.D.)	51	\$67.06	\$32.47	\$151.88	0.13873	GT .01

TABLE BAK-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAK - NEUROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	51	\$67.06	.0364

TABLE BAL-1

## INITIAL RECORD SCREEN FAILURES

## BAL - NUTRITION CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, MOODY AFB	\$35,277	0
USAF HOSP, OSAN KOREA	\$5,029	0
USAF HOSP, CLARK PHIL	\$0	3950

TABLE BAL-2

## DISTRIBUTION SCREEN FAILURES

## BAL - NUTRITION CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC REDSTONE ARSENAL	\$1,442	384	\$3.76	-2.71
18TH MEDCOM HOSPITAL	\$143,497	1433	\$100.14	2.19
NAVAL HOSPITAL LEMOORE	\$5,490	2649	\$2.07	-3.60
SCOTT MED CENTER, SCOTT AFB	\$66,624	11759	\$5.67	-2.10
USAF HOSP, KUNSAN KOREA	\$4,294	12	\$357.83	4.10



TABLE BAL-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAL - NUTRITION CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	141	\$27.17	\$6.21	\$83.95	1.16116	LT .01
GEOMETRIC MEAN COST (2 S.D.)	141	\$23.29	\$6.21	\$83.95	-.01217	GT .01

TABLE BAL-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAL - NUTRITION CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	141	\$23.29	.0127

TABLE BAM-1

INITIAL RECORD SCREEN FAILURES

BAM - ONCOLOGY CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BAM-2

DISTRIBUTION SCREEN FAILURES

BAM - ONCOLOGY CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
USAF REG HOSP, EGLIN AFB	\$95,725	4028	\$23.76	-2.32
GRANT MED CENTER, TRAVIS AFB	\$918,020	35424	\$25.92	-2.14

TABLE BAM-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAM - ONCOLOGY CLINIC  
 FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	23	\$85.77	\$42.06	\$159.17	0.85837	GT .01

TABLE BAM-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAM - ONCOLOGY CLINIC  
 FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	23	\$85.77	.0466

TABLE BAN-1

INITIAL RECORD SCREEN FAILURES

BAN - PULMONARY DISEASE CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BAN-2

DISTRIBUTION SCREEN FAILURES

BAN - PULMONARY DISEASE CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
NAVAL HOSPITAL OAKLAND	\$249,729	14169	\$17.63	-2.81

TABLE BAN-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAN - PULMONARY DISEASE CLINIC  
 FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	28	\$75.44	\$29.98	\$153.66	0.94056	GT .01

TABLE BAN-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAN - PULMONARY DISEASE CLINIC  
 FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	28	\$75.44	.0410

TABLE BAO-1

INITIAL RECORD SCREEN FAILURES

BAO - RHEUMATOLOGY CLINIC

NO FACILITIES FAILED

TABLE BAO-2

DISTRIBUTION SCREEN FAILURES

BAO - RHEUMATOLOGY CLINIC

FACILITY NAME	ADJUSTED		TOTAL		AMBULATORY		S. D. FROM	
	TOTAL		AMBULATORY		VISIT COST		LOGGED MEAN	
	COSTS		VISITS					
NAVAL HOSPITAL OAKLAND	\$16,020		1875		\$8.54		-3.37	

TABLE BAO-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BAO - RHEUMATOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	19	\$67.18	\$36.42	\$129.75	1.09523	LT .01
GEOMETRIC MEAN COST (2 S.D.)	19	\$63.22	\$36.42	\$129.75	0.37116	GT .01

TABLE BAO-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BAO - RHEUMATOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	19	\$63.22	.0343

TABLE BAP-1

## INITIAL RECORD SCREEN FAILURES

## BAP - DERMATOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, YOKOTA JAPAN	\$12,938	0
USAF HOSP, KIRTLAND AFB	\$12	0

TABLE BAP-2

## DISTRIBUTION SCREEN FAILURES

## BAP - DERMATOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
WALTER REED ARMY MEDICAL CENTER	\$1,767,120	20546	\$86.01	2.27
MEDDAC FT MCCLELLAN	\$5,439	409	\$13.30	-3.20
MEDICAL DEPARTMENT (YUMA)	\$6,603	853	\$7.74	-4.78
USAF HOSP, MAXWELL AFB	\$251,131	3077	\$81.62	2.12
USAF HOSP, LAKENHEATH ENG	\$308,804	3071	\$100.56	2.73



TABLE BAP-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BAP - DERMATOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	95	\$40.91	\$23.10	\$77.13	0.88680	LT .01
GEOMETRIC MEAN COST (2 S.D.)	95	\$39.70	\$23.10	\$77.13	0.05880	GT .01

TABLE BAP-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BAP - DERMATOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	95	\$39.70	.0216

TABLE BAZ-1

INITIAL RECORD SCREEN FAILURES

BAZ - MEDICAL CLINICS NEC

NO FACILITES FAILED

TABLE BAZ-2

DISTRIBUTION SCREEN FAILURES

BAZ - MEDICAL CLINICS NEC

NO FACILITES FAILED

TABLE BAZ-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

BAZ - MEDICAL CLINICS NEC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	6	\$70.40	\$13.89	\$132.66	0.13572	GT .01

TABLE BAZ-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

BAZ - MEDICAL CLINICS NEC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
PARAMETER DATA UNSTABLE			

TABLE BBA-1

## INITIAL RECORD SCREEN FAILURES

## BBA - GENERAL SURGERY CLINIC

NO FACILITIES FAILED

TABLE BBA-2

## DISTRIBUTION SCREEN FAILURES

## BBA - GENERAL SURGERY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
EISENHOWER ARMY MEDICAL CENTER	\$1,222,367	7989	\$153.01	2.10
NAVAL MED CLINIC QUANTICO	\$291,407	1381	\$211.01	2.87
NAVAL HOSPITAL PHILADELPHIA	\$663,026	4197	\$157.98	2.18
USAF HOSP, HILL AFB	\$153,306	6924	\$22.14	-2.53
USAF HOSP, HOLLOMAN AFB	\$79,137	3551	\$22.29	-2.51
USAF HOSP, LAJES AZORES	\$265,234	1810	\$146.54	2.00
USAF HOSP, MOUNTAIN HOME AFB	\$115,653	4233	\$27.32	-2.02
USAF HOSP, CANNON AFB	\$129,190	4979	\$25.95	-2.15

TABLE BBA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBA - GENERAL SURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	154	\$68.06	\$29.38	\$144.97	0.96956	LT .01
GEOMETRIC MEAN COST (2 S.D.)	154	\$63.57	\$29.38	\$144.97	0.23296	GT .01

TABLE BBA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBA - GENERAL SURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	154	\$63.57	.0345

TABLE BBB-1

INITIAL RECORD SCREEN FAILURES

BBB - CV/THOR SURGERY CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
------------------	----------------------------	-------------------------------

NO FACILITIES FAILED

TABLE BBB-2

DISTRIBUTION SCREEN FAILURES

BBB - CV/THOR SURGERY CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
WILFORD HALL MED CEN, LACKLAND AFB	\$766,392	1640	\$467.31	2.68

TABLE BBB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBB - CV/THOR SURGERY CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	20	\$69.43	\$22.51	\$160.87	0.89726	GT .01

TABLE BBB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBB - CV/THOR SURGERY CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	20	\$69.43	.0377

TABLE BBC-1

INITIAL RECORD SCREEN FAILURES

BBC - NEUROSURGERY CLINIC

NO FACILITIES FAILED

TABLE BBC-2

DISTRIBUTION SCREEN FAILURES

BBC - NEUROSURGERY CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
NAVAL HOSPITAL OAKLAND	\$86,965	283	\$307.30	2.52



TABLE BBC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBC - NEUROSURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	16	\$107.22	\$63.61	\$177.38	0.52443	GT .01

TABLE BBC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBC - NEUROSURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	16	\$107.22	.0583

TABLE BBD-1

## INITIAL RECORD SCREEN FAILURES

## BBD - OPHTHALMOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USA MEDDAC WUERZBURG	\$544	0
USAF HOSP, HOLLOMAN AFB	\$414	0

TABLE BBD-2

## DISTRIBUTION SCREEN FAILURES

## BBD - OPHTHALMOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC BREMERHAVEN	\$1,619	391	\$4.14	-5.67
NAVAL HOSPITAL GUANTANAMO BAY	\$3,801	202	\$18.82	-2.21
NAVAL HOSPITAL GUAM	\$320,059	2191	\$146.08	2.47

TABLE BBD-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BBD - OPHTHALMOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	94	\$53.68	\$24.92	\$116.52	0.84959	LT .01
GEOMETRIC MEAN COST (2 S.D.)	94	\$50.86	\$24.92	\$116.52	0.13964	GT .01

TABLE BBD-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BBD - OPHTHALMOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	94	\$50.86	.0276

TABLE BBE-1

INITIAL RECORD SCREEN FAILURES

BBE - ORGAN TRANSPLANT CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BBE-2

DISTRIBUTION SCREEN FAILURES

BBE - ORGAN TRANSPLANT CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BBE-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

BBE - ORGAN TRANSPLANT CLINIC

FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	2	\$133.14	\$102.12	\$164.17	N/A	N/A

TABLE BBE-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

BBE - ORGAN TRANSPLANT CLINIC

FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	2	\$133.14	.0723

TABLE BBF-1

## INITIAL RECORD SCREEN FAILURES

## BBF - OTORHINOLARYNGOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, KIRTLAND AFB	\$3,502	0

TABLE BBF-2

## DISTRIBUTION SCREEN FAILURES

## BBF - OTORHINOLARYNGOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT HUACHUCA	\$26,475	1401	\$18.90	-2.07
MEDDAC FT MONMOUTH	\$17,205	37	\$465.00	4.14
USA MEDDAC WUERZBURG	\$1,878	163	\$11.52	-3.03
USAF HOSP, TORREJON SPAIN	\$12,554	1187	\$10.58	-3.19

TABLE BBF-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBF - OTORHINOLARYNGOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	92	\$60.67	\$19.63	\$150.42	1.01692	LT .01
GEOMETRIC MEAN COST (2 S.D.)	92	\$56.19	\$19.63	\$150.42	-.10322	GT .01

TABLE BBF-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBF - OTORHINOLARYNGOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	92	\$56.19	.0305

TABLE BBG-1

INITIAL RECORD SCREEN FAILURES

BBG - PLASTIC SURGERY CLINIC

NO FACILITIES FAILED

TABLE BBG-2

DISTRIBUTION SCREEN FAILURES

BBG - PLASTIC SURGERY CLINIC

NO FACILITIES FAILED



TABLE BBG-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BBG - PLASTIC SURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	22	\$74.76	\$26.94	\$145.17	0.67671	GT .01

TABLE BBG-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BBG - PLASTIC SURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	22	\$74.76	.0406

TABLE BBH-1

INITIAL RECORD SCREEN FAILURES

BBH - PROCOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF REG HOSP, SHEPPARD AFB	\$133	0

TABLE BBH-2

DISTRIBUTION SCREEN FAILURES

BBH - PROCOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
KEESLER MED CENTER, KEESLER AFB	\$93,558	488	\$191.72	2.28

TABLE BBH-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBH - PROCOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	14	\$43.08	\$17.38	\$84.84	0.80324	GT .01

TABLE BBH-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBH - PROCOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	14	\$43.08	.0234

TABLE BBI-1  
INITIAL RECORD SCREEN FAILURES  
BBI - UROLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC BAD CANNSTATT	\$535	0
USA MEDDAC WUERZBURG	\$2,570	0
USAF HOSP, YOKOTA JAPAN	\$496	0

TABLE BBI-2  
DISTRIBUTION SCREEN FAILURES  
BBI - UROLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT LEAVENWORTH	\$19,958	938	\$21.28	-3.50
NAVAL HOSPITAL PHILADELPHIA	\$166,304	1072	\$155.13	2.12
USAF HOSP, MAXWELL AFB	\$326,791	1784	\$183.18	2.59

TABLE BBI-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBI - UROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	84	\$76.50	\$37.10	\$146.70	0.90313	LT .01
GEOMETRIC MEAN COST (2 S.D.)	84	\$72.98	\$37.10	\$146.70	0.13951	GT .01

TABLE BBI-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBI - UROLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	84	\$72.98	.0397

TABLE BBJ-1

INITIAL RECORD SCREEN FAILURES

BBJ - PEDIATRIC SURGERY CLINIC

NO FACILITIES FAILED

TABLE BBJ-2

DISTRIBUTION SCREEN FAILURES

BBJ - PEDIATRIC SURGERY CLINIC

NO FACILITIES FAILED

TABLE BBJ-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BBJ - PEDIATRIC SURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	3	\$91.21	\$35.00	\$153.23	0.43683	GT .01

TABLE BBJ-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BBJ - PEDIATRIC SURGERY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	3	\$91.21	.0496

TABLE BBZ-1

INITIAL RECORD SCREEN FAILURES

BBZ - SURGICAL CLINICS NEC

NO FACILITIES REMAINING





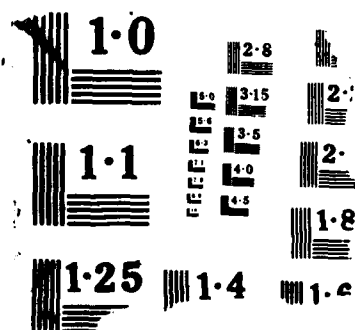


TABLE BCA-1

## INITIAL RECORD SCREEN FAILURES

## BCA - FAMILY PLANNING CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MARCH REG HOSP, MARCH AFB	\$2,678	0
USAF HOSP, DYESS AFB	\$4	0
USAF HOSP, MYRTLE BEACH AFB	\$1,576	0
USAF HOSP, ENGLAND AFB	\$156	0
USAF HOSP, BERGSTROM AFB	\$36,646	0

TABLE BCA-2

## DISTRIBUTION SCREEN FAILURES

## BCA - FAMILY PLANNING CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
BROOKE ARMY MEDICAL CENTER	\$443,898	1195	\$371.46	3.46
USAF HOSP, PEASE AFB	\$14,273	1209	\$11.81	-2.28
USAF HOSP, LUKE AFB	\$65,767	343	\$191.74	2.36
USAF HOSP, CLARK PHIL	\$20,962	1588	\$13.20	-2.10

TABLE BCA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BCA - FAMILY PLANNING CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	54	\$50.81	\$14.16	\$145.31	1.63350	LT .01
GEOMETRIC MEAN COST (2 S.D.)	54	\$45.79	\$14.16	\$145.31	0.25173	GT .01

TABLE BCA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BCA - FAMILY PLANNING CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	54	\$45.79	.0249

TABLE BCB-1  
INITIAL RECORD SCREEN FAILURES  
BCB - GYNECOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, PATRICK AFB	\$9,426	0

TABLE BCB-2  
DISTRIBUTION SCREEN FAILURES  
BCB - GYNECOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
FITZSIMONS ARMY MEDICAL CTR	\$942,282	5567	\$169.26	4.18
MEDDAC FT MONMOUTH	\$698,229	5644	\$123.71	3.21
MEDDAC WEST POINT	\$346,764	3788	\$91.54	2.27
NAVAL MED CLINIC QUANTICO	\$6,309	280	\$22.53	-2.08
NAVAL HOSPITAL GUANTANAMO BAY	\$122,757	1425	\$86.15	2.08
NAVAL HOSPITAL OAK HARBOR	\$131,832	5952	\$22.15	-2.14
NAVAL HOSPITAL LONG BEACH	\$665,855	5504	\$120.98	3.14
NAVAL HOSPITAL PHILADELPHIA	\$1,072,051	11859	\$90.40	2.23
USAF HOSP, MAXWELL AFB	\$463,947	4888	\$94.92	2.39
USAF HOSP, MISAWA JAPAN	\$85,617	4824	\$17.75	-2.83
USAF HOSP, CANNON AFB	\$95,085	8426	\$11.28	-4.23

TABLE BCB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BCB - GYNECOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	175	\$44.59	\$23.60	\$74.06	0.57571	LT .01
GEOMETRIC MEAN COST (2 S.D.)	175	\$43.40	\$23.60	\$74.06	-.03592	GT .01

TABLE BCB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BCB - GYNECOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	175	\$43.40	.0236

TABLE BCC-1

## INITIAL RECORD SCREEN FAILURES

## BCC - OBSTETRICS CLINIC

NO FACILITIES FAILED

TABLE BCC-2

## DISTRIBUTION SCREEN FAILURES

## BCC - OBSTETRICS CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MADIGAN ARMY MEDICAL CENTER	\$771,155	42451	\$18.17	-2.57
NAVMECDCL SAN DIEGO	\$233,447	13104	\$17.81	-2.63
NAVAL HOSPITAL GUANTANAMO BAY	\$111,000	1121	\$99.02	2.05
NAVMEC CLINIC PEARL HARBOR	\$79,992	4773	\$16.76	-2.79
NAVAL HOSPITAL PHILADELPHIA	\$929,991	7315	\$127.13	2.73
NAVAL MEDICAL CLINIC NORFOLK	\$984,439	44579	\$22.08	-2.04
USAF HOSP, MAXWELL AFB	\$331,063	2921	\$113.34	2.42
USAF HOSP, MISAWA JAPAN	\$66,012	3652	\$18.08	-2.59
USAF HOSP, OSAN KOREA	\$9,773	443	\$22.06	-2.04
USAF HOSP, CANNON AFB	\$63,351	5740	\$11.04	-3.93

TABLE BCC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BCC - OBSTETRICS CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	158	\$49.94	\$23.78	\$95.16	0.88922	LT .01
GEOMETRIC MEAN COST (2 S.D.)	158	\$47.91	\$23.78	\$95.16	0.11547	GT .01

TABLE BCC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BCC - OBSTETRICS CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	158	\$47.91	.0260



TABLE BDA-1

## INITIAL RECORD SCREEN FAILURES

## BDA - PEDIATRIC CLINIC

NO FACILITIES FAILED

TABLE BDA-2

## DISTRIBUTION SCREEN FAILURES

## BDA - PEDIATRIC CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
NAVMEDCL SAN DIEGO	\$148,646	10279	\$14.46	-2.89
NAVAL HOSPITAL NAPLES	\$120,814	1549	\$77.99	2.30
USAF CLINIC, AVIANO ITALY	\$544,742	3242	\$168.03	4.67
USAF HOSP, MAXWELL AFB	\$763,385	10361	\$73.68	2.13
USAF HOSP, MISAWA JAPAN	\$73,569	5189	\$14.18	-2.95
WILFORD HALL MED CEN, LACKLAND AFB	\$3,491,151	43244	\$80.73	2.41
USAF HOSP, CANNON AFB	\$93,526	10802	\$8.66	-4.47

TABLE BDA-3

DESCRIPTIVE STATISTICS  
 DISTRIBUTION SCREEN PASSES  
 BDA - PEDIATRIC CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	187	\$38.13	\$19.33	\$67.87	0.76510	LT .01
GEOMETRIC MEAN COST (2 S.D.)	187	\$36.86	\$19.33	\$67.87	0.13688	GT .01

TABLE BDA-4

AMBULATORY WORK UNIT  
 DISTRIBUTION SCREEN PASSES  
 BDA - PEDIATRIC CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	187	\$36.86	.0200

TABLE BDB-1

## INITIAL RECORD SCREEN FAILURES

## BDB - ADOLESCENT CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, LAUGHLIN AFB	\$11	0

TABLE BDB-2

## DISTRIBUTION SCREEN FAILURES

## BDB - ADOLESCENT CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC AUGSBURG	\$24,276	1649	\$14.72	-2.09
NAVAL HOSPITAL CAMP PENDLETON	\$27,459	1833	\$14.98	-2.05

TABLE BDB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BDB - ADOLESCENT CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	31	\$46.66	\$20.93	\$88.04	0.57573	GT .01

TABLE BDB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BDB - ADOLESCENT CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	31	\$46.66	.0254

TABLE BDC-1

## INITIAL RECORD SCREEN FAILURES

## BDC - WELL BABY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, MOODY AFB	\$2,023	0
USAF HOSP, TORREJON SPAIN	\$29,354	0
USAF CLINIC, GREENHAM COMMON ENG	\$24,884	0

TABLE BDC-2

## DISTRIBUTION SCREEN FAILURES

## BDC - WELL BABY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT IRWIN	\$30,910	385	\$80.29	2.18
MEDDAC VICENZA	\$27,836	2879	\$9.67	-2.08
NAVAL HOSPITAL GREAT LAKES	\$359,922	4532	\$79.42	2.16
NAVAL HOSPITAL PATUXENT RIVER	\$5,080	996	\$5.10	-3.37
NAVAL MEDICAL CLINIC NORFOLK	\$33,868	5895	\$5.75	-3.13
USAF HOSP, INCIRLIK TURKEY	\$1,778	190	\$9.36	-2.15
USAF HOSP, PATRICK AFB	\$13,405	1915	\$7.00	-2.73
USAF HOSP, HOLLOMAN AFB	\$56,326	7637	\$7.38	-2.63
USAF HOSP, MYRTLE BEACH AFB	\$4,891	705	\$6.94	-2.75

TABLE BDC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BDC - WELL BABY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	137	\$30.79	\$10.23	\$72.13	0.82886	LT .01
GEOMETRIC MEAN COST (2 S.D.)	137	\$28.66	\$10.23	\$72.13	-.24106	GT .01

TABLE BDC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BDC - WELL BABY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	137	\$28.66	.0156

TABLE BDZ-1

INITIAL RECORD SCREEN FAILURES

BDZ - PEDIATRIC CARE NEC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
TRIPLER ARMY MEDICAL CENTER	\$16,739	0

TABLE BDZ-2

DISTRIBUTION SCREEN FAILURES

BDZ - PEDIATRIC CARE NEC

NO FACILITIES FAILED

TABLE BDZ-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BDZ - PEDIATRIC CARE NEC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	19	\$216.17	\$26.31	\$906.00	1.91531	LT .01
GEOMETRIC MEAN COST (2 S.D.)	19	\$136.64	\$26.31	\$906.00	0.19260	GT .01

TABLE BDZ-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BDZ - PEDIATRIC CARE NEC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
PARAMETER DATA UNSTABLE			



TABLE BEA-1

## INITIAL RECORD SCREEN FAILURES

## BEA - ORTHOPEDIC CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC BREMERHAVEN	\$20,173	0
USAF HOSP, TYNDALL AFB	\$1,389	0
USAF HOSP, MYRTLE BEACH AFB	\$4,901	0

TABLE BEA-2

## DISTRIBUTION SCREEN FAILURES

## BEA - ORTHOPEDIC CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT RUCKER	\$25	11	\$2.27	-6.70
USA HOSP LANDSTUHL, GER	\$612,883	123197	\$4.97	-5.13
USAF HOSP, MAXWELL AFB	\$518,501	2909	\$178.24	2.04
USAF HOSP, YOKOTA JAPAN	\$269,274	1424	\$189.10	2.16

TABLE BEA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BEA - ORTHOPEDIC CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	118	\$69.46	\$36.35	\$134.23	0.88770	LT .01
GEOMETRIC MEAN COST (2 S.D.)	118	\$66.54	\$36.35	\$134.23	0.06319	GT .01

TABLE BEA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BEA - ORTHOPEDIC CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	118	\$66.54	.0362

TABLE BEB-1

## INITIAL RECORD SCREEN FAILURES

## BEB - CAST CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
NAVAL HOSPITAL PENSACOLA	\$90	0
USAF HOSP, INCIRLIK TURKEY	\$4,270	0
USAF HOSP, HILL AFB	\$4,517	0
USAF HOSP, LUKE AFB	\$13	0
USAF HOSP, UPPER HEYFORD ENG	\$74,971	0

TABLE BEB-2

## DISTRIBUTION SCREEN FAILURES

## BEB - CAST CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT RUCKER	\$58,482	394	\$148.43	2.80
USA MEDDAC NUERNBERG	\$151,903	11988	\$12.67	-2.18
GRANT MED CENTER, TRAVIS AFB	\$41,677	211	\$197.52	3.38
MED CEN, WRIGHT-PATTERSON AFB	\$69,786	5859	\$11.91	-2.31

TABLE BEB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BEB - CAST CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	79	\$39.92	\$16.61	\$94.54	0.90854	LT .01
GEOMETRIC MEAN COST (2 S.D.)	79	\$36.87	\$16.61	\$94.54	-.11523	GT .01

TABLE BEB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BEB - CAST CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	79	\$36.87	.0200

TABLE BEC-1

INITIAL RECORD SCREEN FAILURES

BEC - HAND SURGERY CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BEC-2

DISTRIBUTION SCREEN FAILURES

BEC - HAND SURGERY CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BEC-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

BEC - HAND SURGERY CLINIC

FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	9	\$48.25	\$19.33	\$110.88	1.65152	LT .01
GEOMETRIC MEAN COST (2 S.D.)	9	\$42.69	\$19.33	\$110.88	0.38653	GT .01

TABLE BEC-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

BEC - HAND SURGERY CLINIC

FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	9	\$42.69	.0232

TABLE BED-1

INITIAL RECORD SCREEN FAILURES

BED - NEUROMUSCULOSKELETAL SCREENING CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
TRIPLER ARMY MEDICAL CENTER	\$4,637	0

TABLE BED-2

DISTRIBUTION SCREEN FAILURES

BED - NEUROMUSCULOSKELETAL SCREENING CLINIC

FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT MEADE	\$509	990	\$0.51	-2.77

TABLE BED-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BED - NEUROMUSCULOSKELETAL SCREENING CLINIC

FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	14	\$46.46	\$5.58	\$306.76	3.57322	LT .01
GEOMETRIC MEAN COST (2 S.D.)	14	\$27.74	\$5.58	\$306.76	1.15011	LT .01

TABLE BED-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BED - NEUROMUSCULOSKELETAL SCREENING CLINIC

FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
MEDIAN	14	\$24.40	.0133



TABLE BEE-1

INITIAL RECORD SCREEN FAILURES  
BEE - ORTHOPEDIC APPLIANCE CLINIC

NO FACILITIES FAILED

TABLE BEE-2

DISTRIBUTION SCREEN FAILURES  
BEE - ORTHOPEDIC APPLIANCE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT POLK	\$22,906	3157	\$7.26	-2.88
MEDDAC BAD CANNSTATT	\$83,122	6384	\$13.02	-2.04
MEDDAC VICENZA	\$3,945	363	\$10.87	-2.30

TABLE BEE-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BEE - ORTHOPEDIC APPLIANCE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	54	\$70.92	\$19.43	\$219.17	1.24740	LT .01
GEOMETRIC MEAN COST (2 S.D.)	54	\$59.93	\$19.43	\$219.17	0.06696	GT .01

TABLE BEE-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BEE - ORTHOPEDIC APPLIANCE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	54	\$59.93	.0326

TABLE BEF-1

INITIAL RECORD SCREEN FAILURES

BEF - PODIATRY CLINIC

NO FACILITIES FAILED

TABLE BEF-2

DISTRIBUTION SCREEN FAILURES

BEF - PODIATRY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
NAVAL HOSPITAL GREAT LAKES	\$340,811	19772	\$17.24	-2.02
NAVAL MED CLINIC QUANTICO	\$24,566	256	\$95.96	2.28
NAVMECL SAN DIEGO	\$360,762	24098	\$14.97	-2.37
NAVAL HOSPITAL PHILADELPHIA	\$150,063	1115	\$134.59	3.12
MED CEN, WRIGHT-PATTERSON AFB	\$57,767	4017	\$14.38	-2.47

TABLE BEF-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BEF - PODIATRY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	73	\$40.95	\$18.86	\$77.62	0.82764	LT .01
GEOMETRIC MEAN COST (2 S.D.)	73	\$38.91	\$18.86	\$77.62	0.14208	GT .01

TABLE BEF-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BEF - PODIATRY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	73	\$38.91	.0211

TABLE BFA-1  
INITIAL RECORD SCREEN FAILURES  
BFA - PSYCHIATRY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
SHAW REG HOSP, SHAW AFB	\$1,933	0

TABLE BFA-2  
DISTRIBUTION SCREEN FAILURES  
BFA - PSYCHIATRY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
18TH MEDCOM HOSPITAL	\$215,539	976	\$220.84	2.47
NAVAL HOSPITAL GREAT LAKES	\$549,689	37316	\$14.73	-2.83
NAVAL HOSPITAL, NEWPORT, RI	\$215,241	9653	\$22.30	-2.02

TABLE BFA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BFA - PSYCHIATRY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	70	\$70.03	\$23.10	\$164.76	0.80220	LT .01
GEOMETRIC MEAN COST (2 S.D.)	70	\$63.60	\$23.10	\$164.76	-.18424	GT .01

TABLE BFA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BFA - PSYCHIATRY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	70	\$63.60	.0346

TABLE BFB-1

## INITIAL RECORD SCREEN FAILURES

## BFB - PSYCHOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC VICENZA	\$35,453	0

TABLE BFB-2

## DISTRIBUTION SCREEN FAILURES

## BFB - PSYCHOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT BENNING	\$15,277	1111	\$13.75	-2.06
18TH MEDCOM HOSPITAL	\$33,613	167	\$201.28	2.15
MEDDAC BREMERHAVEN	\$3,093	466	\$6.64	-3.20
NAVAL HOSPITAL, BEAUFORT	\$100,320	13504	\$7.43	-3.02

TABLE BFB-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

BFB - PSYCHOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	65	\$61.55	\$15.66	\$175.29	1.41373	LT .01
GEOMETRIC MEAN COST (2 S.D.)	65	\$54.31	\$15.66	\$175.29	0.16876	GT .01

TABLE BFB-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

BFB - PSYCHOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	65	\$54.31	.0295



TABLE BFC-1

INITIAL RECORD SCREEN FAILURES

BFC - CHILD GUIDANCE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USA HOSP LANDSTUHL, GER	\$251	0

TABLE BFC-2

DISTRIBUTION SCREEN FAILURES

BFC - CHILD GUIDANCE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
USAF HOSP, CLARK PHIL	\$3,041	396	\$7.68	-2.96

TABLE BFC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BFC - CHILD GUIDANCE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	15	\$55.22	\$25.40	\$109.45	1.44288	LT .01
GEOMETRIC MEAN COST (2 S.D.)	15	\$51.34	\$25.40	\$109.45	0.56564	GT .01

TABLE BFC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BFC - CHILD GUIDANCE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	15	\$51.34	.0279

TABLE BFD-1

## INITIAL RECORD SCREEN FAILURES

## BFD - MENTAL HEALTH CLINIC

## FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, LAJES AZORES	\$22,345	0
USAF HOSP, GEORGE AFB	\$59	0

TABLE BFD-2

## DISTRIBUTION SCREEN FAILURES

## BFD - MENTAL HEALTH CLINIC

## FY 1984 AND FY 1985 DATA

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
USAF CLINIC, RHEIN-MAIN GER	\$49,416	203	\$243.43	3.24
TUSLOG DET 119, IZMIR TURKEY	\$294,221	1937	\$151.90	2.14
TUSLOG DET 37, ANKARA TURKEY	\$82,771	444	\$186.42	2.62
USAF HOSP, MISAWA JAPAN	\$183,448	7416	\$24.74	-2.10
USAF HOSP, CANNON AFB	\$156,432	11478	\$13.63	-3.49
USAF HOSP, LAKENHEATH ENG	\$982,334	39316	\$24.99	-2.08
USAF CLINIC, GREENHAM COMMON ENG	\$117,649	804	\$146.33	2.05
BROOKE ARMY MEDICAL CENTER	\$35,443	3121	\$11.36	-3.92

TABLE BFD-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BFD - MENTAL HEALTH CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	116	\$64.07	\$29.38	\$119.03	0.59376	LT .01
GEOMETRIC MEAN COST (2 S.D.)	116	\$61.11	\$29.38	\$119.03	-.00399	GT .01

TABLE BFD-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BFD - MENTAL HEALTH CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	116	\$61.11	.0332

TABLE DHE-1

## INITIAL RECORD SCREEN FAILURES

## DHE - SOCIAL WORK SERVICES

FACILITY NAME	TOTAL COSTS	ANCILLARY WORKLOAD
USAF HOSP, HOLLOMAN AFB	\$0	133
MEDDAC VICENZA	\$22,780	0

TABLE DHE-2

## DISTRIBUTION SCREEN FAILURES

## DHE - SOCIAL WORK SERVICES

FACILITY NAME	TOTAL COSTS	ANCILLARY WORKLOAD	ANCILLARY VISIT COST	S. D. FROM LOGGED MEAN
USAF HOSP, MISAWA JAPAN	\$14,180	2427	\$5.84	-2.47
USAF HOSP, LUKE AFB	\$23,929	3341	\$7.16	-2.20
USAF HOSP, ALTUS AFB	\$2,725	1241	\$2.20	-3.75
MEDDAC FT HUACHUCA	\$95,969	288	\$333.23	2.81
MEDDAC FT POLK	\$11,345	3119	\$3.64	-3.09
USA MEDDAC WUERZBURG	\$2,845	1	2845.00	5.61

TABLE DHE-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## DHE - SOCIAL WORK SERVICES

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	140	\$45.23	\$8.41	\$136.71	1.17903	LT .01
GEOMETRIC MEAN COST (2 S.D.)	140	\$39.29	\$8.41	\$136.71	-.30798	GT .01

TABLE DHE-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## DHE - SOCIAL WORK SERVICES

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	140	\$39.29	.0213

TABLE BHA-1

## INITIAL RECORD SCREEN FAILURES

## BHA - PRIMARY CARE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, EDWARDS AFB	\$1,301	0
USAF HOSP, MATHER AFB	\$9	0
USAF HOSP, DAVIS-MONTHON AFB	\$416,128	0
USAF HOSP, YOKOTA JAPAN	\$20,117	0
USAF HOSP, ENGLAND AFB	\$12,988	0
USAF HOSP, MOUNTAIN HOME AFB	\$53	0

TABLE BHA-2

## DISTRIBUTION SCREEN FAILURES

## BHA - PRIMARY CARE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC WEST POINT	\$2,058,102	22383	\$91.95	2.03
MEDDAC FT LEAVENWORTH	\$1,715,670	87063	\$19.71	-2.61
NAVAL HOSPITAL GREAT LAKES	\$5,039,263	290476	\$17.35	-2.99
NAVAL HOSPITAL, BEAUFORT	\$2,818,235	166456	\$16.93	-3.07
NAVAL HOSPITAL BREMERTON	\$1,754,867	18645	\$94.12	2.10
USAF CLINIC, AVIANO ITALY	\$2,316,639	21526	\$107.62	2.50
TUSLOG DET 37, ANKARA TURKEY	\$1,118,703	8725	\$128.22	3.03
USAF HOSP, LAJES AZORES	\$789,536	8667	\$91.10	2.00

TABLE BHA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BHA - PRIMARY CARE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	165	\$48.41	\$24.64	\$87.45	0.35647	GT .01

TABLE BHA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BHA - PRIMARY CARE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	165	\$48.41	.0263



TABLE BHB-1

## INITIAL RECORD SCREEN FAILURES

## BHB - MEDICAL EXAMINATION CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, IRAKLION CRETE	\$8,767	0
LOWRY USAF/HDC	\$0	205
USAF HOSP, ELLSWORTH AFB	\$25,878	0
MINOT REG HOSP, MINOT AFB	\$199	0
USAF HOSP, CANNON AFB	\$0	2523
USAF HOSP, TORREJON SPAIN	\$19,806	0

TABLE BHB-2

## DISTRIBUTION SCREEN FAILURES

## BHB - MEDICAL EXAMINATION CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
WALTER REED ARMY MEDICAL CENTER	\$255,919	748	\$342.14	2.00
MEDDAC AUGSBURG	\$9,010	872	\$10.33	-2.04
USAF HOSP, ROBINS AFB	\$11,011	2873	\$3.83	-3.19
RANDOLPH USAF/HDC	\$48,509	126	\$384.99	2.14
USAF HOSP, K I SAWYER AFB	\$681	154	\$4.42	-3.02
SHAW REG HOSP, SHAW AFB	\$336,317	438	\$767.85	2.94
USAF CLINIC, GEILENKIRCHEN	\$4,605	11	\$418.64	2.24

TABLE BHB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BHB - MEDICAL EXAMINATION CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	125	\$77.31	\$11.05	\$280.80	1.64965	LT .01
GEOMETRIC MEAN COST (2 S.D.)	125	\$60.03	\$11.05	\$280.80	0.01788	GT .01

TABLE BHB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BHB - MEDICAL EXAMINATION CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	125	\$60.03	.0326

TABLE BHC-1

## INITIAL RECORD SCREEN FAILURES

## BHC - OPTOMETRY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, CANNON AFB	\$0	4754
USAF CLINIC, GEILENKIRCHEN	\$36,381	0

TABLE BHC-2

## DISTRIBUTION SCREEN FAILURES

## BHC - OPTOMETRY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MADIGAN ARMY MEDICAL CENTER	\$294,951	23049	\$12.80	-2.20
MEDDAC FT DIX	\$513,544	41244	\$12.45	-2.28
NAVAL HOSPITAL GREAT LAKES	\$597,966	63274	\$9.45	-3.01
MEDICAL DEPARTMENT (YUMA)	\$36,222	3056	\$11.85	-2.41
NAVAL HOSPITAL ORLANDO	\$554,266	40383	\$13.73	-2.02
NAVAL HOSPITAL PATUXENT RIVER	\$292,739	4718	\$62.05	2.02
NAVAL HOSPITAL PHILADELPHIA	\$23,356	5392	\$4.33	-5.10
USAF HOSP, TINKER AFB	\$140,184	10365	\$13.52	-2.05
USAF CLINIC, CANEL ZONE PANAMA	\$166,175	2508	\$66.26	2.19
USAF CLINIC, ZWEIBRUECKEN GER	\$258,003	3622	\$71.23	2.38
USAF HOSP, UPPER HEYFORD ENG	\$116,536	9123	\$12.77	-2.21

TABLE BHC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BHC - OPTOMETRY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	191	\$31.40	\$15.79	\$59.02	0.76011	LT .01
GEOMETRIC MEAN COST (2 S.D.)	191	\$30.03	\$15.79	\$59.02	0.07256	GT .01

TABLE BHC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BHC - OPTOMETRY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	191	\$30.03	.0163

TABLE BHD-1

## INITIAL RECORD SCREEN FAILURES

## BHD - AUDIOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC VICENZA	\$1,870	0
NAVAL HOSPITAL BETHESDA MD	\$112	0
USAF HOSP, LAKENHEATH ENG	\$43,366	0

TABLE BHD-2

## DISTRIBUTION SCREEN FAILURES

## BHD - AUDIOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC BREMERHAVEN	\$16,584	2572	\$6.45	-2.22
NAVAL MEDICAL CLINIC NORFOLK	\$449,029	61915	\$7.25	-2.03

TABLE BHD-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BHD - AUDIOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	67	\$32.70	\$8.87	\$83.49	0.81301	LT .01
GEOMETRIC MEAN COST (2 S.D.)	67	\$27.66	\$8.87	\$83.49	-.21212	GT .01

TABLE BHD-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BHD - AUDIOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	67	\$27.66	.0150

TABLE BHE-1

## INITIAL RECORD SCREEN FAILURES

## BHE - SPEECH PATHOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC VICENZA	\$8,846	0

TABLE BHE-2

## DISTRIBUTION SCREEN FAILURES

## BHE - SPEECH PATHOLOGY CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT CAMPBELL	\$11,401	2651	\$4.30	-2.54
MEDDAC BAD CANNSTATT	\$3,060	1536	\$1.99	-3.45

TABLE BHE-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

BHE - SPEECH PATHOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	30	\$48.33	\$11.47	\$123.05	1.24518	LT .01
GEOMETRIC MEAN COST (2 S.D.)	30	\$42.64	\$11.47	\$123.05	-.47391	GT .01

TABLE BHE-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

BHE - SPEECH PATHOLOGY CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	30	\$42.64	.0232



TABLE BG-1

## INITIAL RECORD SCREEN FAILURES

## BG - FAMILY PRACTICE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, CANNON AFB	\$0	29638

TABLE BG-2

## DISTRIBUTION SCREEN FAILURES

## BG - FAMILY PRACTICE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT BRAGG	\$1,683,510	73100	\$23.03	-2.18
MEDDAC VICENZA	\$317,921	3264	\$97.40	2.21
PETERSON USAF/HDC	\$34,489	2299	\$15.00	-3.49
USAF HOSP, MAXWELL AFB	\$3,700,178	28249	\$130.98	3.12
USAF HOSP, MISAWA JAPAN	\$377,246	23615	\$15.97	-3.30

TABLE BG-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

BG - FAMILY PRACTICE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	99	\$49.24	\$24.70	\$77.70	0.10735	GT .01

TABLE BG-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

BG - FAMILY PRACTICE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	99	\$49.24	.0268

TABLE BI-1

## INITIAL RECORD SCREEN FAILURES

## BI - EMERGENCY MEDICINE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, CANNON AFB	\$0	11460

TABLE BI-2

## DISTRIBUTION SCREEN FAILURES

## BI - EMERGENCY MEDICINE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDICAL DEPARTMENT (YUMA)	\$137,202	8593	\$15.97	-2.81
USAF CLINIC, SAN VITO ITALY	\$151,983	535	\$284.08	2.69
USAF HOSP, IRAKLION CRETE	\$425,454	2140	\$198.81	2.01
USAF CLINIC, AVIANO ITALY	\$69,148	130	\$531.91	3.88
USAF CLINIC, CHICKSANDS ENG	\$93,779	233	\$402.48	3.35
TUSLOG DET 37, ANKARA TURKEY	\$651,499	1294	\$503.48	3.78
HANSCOM USAF/HDC	\$400,364	1437	\$278.61	2.65
USAF HOSP, LAJES AZORES	\$782,824	3714	\$210.78	2.12
USAF HOSP, OSAN KOREA	\$959,446	43380	\$22.12	-2.19
USAF CLINIC, ZARAGOZA SPAIN	\$494,976	1756	\$281.88	2.67
USAF CLINIC, CANEL ZONE PANAMA	\$325,073	619	\$525.16	3.86
MCCHORD USAF/HDC	\$295,833	251	1178.62	5.40

TABLE BI-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BI - EMERGENCY MEDICINE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	184	\$67.66	\$30.64	\$183.56	1.68489	LT .01
GEOMETRIC MEAN COST (2 S.D.)	184	\$64.32	\$30.64	\$183.56	0.65023	LT .01

TABLE BI-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BI - EMERGENCY MEDICINE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
MEDIAN	184	\$61.60	.0335

TABLE BJ-1

## INITIAL RECORD SCREEN FAILURES

## BJ - FLIGHT MEDICINE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS
USAF HOSP, CANNON AFB	\$0	7204

TABLE BJ-2

## DISTRIBUTION SCREEN FAILURES

## BJ - FLIGHT MEDICINE CLINIC

FACILITY NAME	ADJUSTED TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC FT CAMPBELL	\$82,031	4936	\$16.62	-2.13
MEDDAC FT MCCLELLAN	\$22,014	82	\$268.46	2.98
MEDDAC BAD CANNSTATT	\$8,054	1703	\$4.73	-4.44
18TH MEDCOM HOSPITAL	\$61,836	3893	\$15.88	-2.21
USAF CLINIC, AVIANO ITALY	\$478,091	1394	\$342.96	3.43
LOS ANGELES USAF/HDC	\$96,293	379	\$254.07	2.88
USAF CLINIC, ANDERSON GUAM	\$99,285	5592	\$17.75	-2.01
USAF CLINIC, NEW AMSTERDAM NETH	\$153,438	703	\$218.26	2.60

TABLE BJ-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BJ - FLIGHT MEDICINE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	167	\$58.03	\$18.15	\$149.46	1.52868	LT .01
GEOMETRIC MEAN COST (2 S.D.)	167	\$52.72	\$18.15	\$149.46	0.21904	GT .01

TABLE BJ-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BJ - FLIGHT MEDICINE CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	167	\$52.72	.0286

TABLE BK-1

INITIAL RECORD SCREEN FAILURES

BK - UNDERSEAS MEDICINE CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BK-2

DISTRIBUTION SCREEN FAILURES

BK - UNDERSEAS MEDICINE CLINIC

FY 1984 AND FY 1985 DATA

NO FACILITIES FAILED

TABLE BK-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## BK - UNDERSEAS MEDICINE CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	5	\$162.92	\$13.52	\$657.13	2.20086	LT .01
GEOMETRIC MEAN COST (2 S.D.)	5	\$59.17	\$13.52	\$657.13	1.21760	LT .01

TABLE BK-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## BK - UNDERSEAS MEDICINE CLINIC

## FY 1984 AND FY 1985 DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
MEDIAN	5	\$55.97	.0304



TABLE CA-1

## INITIAL RECORD SCREEN FAILURES

## CA - DENTAL SERVICES

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES
USAF HOSP, CANNON AFB	\$0	92427
USAF CLINIC, GEILENKIRCHEN	\$36,907	0

TABLE CA-2

## DISTRIBUTION SCREEN FAILURES

## CA - DENTAL SERVICES

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES	DENTAL PROCEDURE COST	S. D. FROM LOGGED MEAN
USAF HOSP, KUNSAN KOREA	\$378,002	135706	\$2.79	-2.30
MADIGAN ARMY MEDICAL CENTER	\$1,533	16296	\$0.09	-8.12
LETTERMAN ARMY MEDICAL CENTER	\$2,842	4333	\$0.66	-4.79
MEDDAC FT LEONARD WOOD	\$1,526	1182	\$1.29	-3.62
WALTER REED ARMY MEDICAL CENTER	\$1,010,702	23747	\$42.56	2.39
MEDDAC FT BENNING	\$58,503	37629	\$1.55	-3.30
MEDDAC FT SILL	\$2,943	1881	\$1.56	-3.29
MEDDAC VICENZA	\$17,329	10401	\$1.67	-3.18
NAVAL DENTAL CLINIC GLAKES	\$1,031,626	357195	\$2.89	-2.24

TABLE CA-3

DESCRIPTIVE STATISTICS  
DISTRIBUTION SCREEN PASSES  
CA - DENTAL SERVICES

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	196	\$12.03	\$3.63	\$27.80	1.13227	LT .01
GEOMETRIC MEAN COST (2 S.D.)	196	\$11.53	\$3.63	\$27.80	-.41561	LT .01

TABLE CA-4

AMBULATORY WORK UNIT  
DISTRIBUTION SCREEN PASSES  
CA - DENTAL SERVICES

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN 196	196	\$11.53	.0063

TABLE CB-1

## INITIAL RECORD SCREEN FAILURES

## CB - TYPE 2 DENTAL PROSTHETIC LABORATORY

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES
LETTERMAN ARMY MEDICAL CENTER	\$0	2075
MEDDAC FT RILEY	\$0	74
MEDDAC BREMERHAVEN	\$10,101	0

TABLE CB-2

## DISTRIBUTION SCREEN FAILURES

## CB - TYPE 2 DENTAL PROSTHETIC LABORATORY

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES	DENTAL PROCEDURE COST	S. D. FROM LOGGED MEAN
MEDDAC BAD CANNSTATT	\$31,182	1021	\$30.54	2.68
MADIGAN ARMY MEDICAL CENTER	\$5,435	9542	\$0.57	-2.07
FITZSIMONS ARMY MEDICAL CTR	\$62,978	1902	\$33.11	2.77

TABLE CB-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## CB - TYPE 2 DENTAL PROSTHETIC LABORATORY

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	48	\$3.82	\$0.68	\$12.79	1.71812	LT .01
GEOMETRIC MEAN COST (2 S.D.)	48	\$3.04	\$0.68	\$12.79	0.11118	GT .01

TABLE CB-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## CB - TYPE 2 DENTAL PROSTHETIC LABORATORY

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	48	\$3.04	.0017

TABLE CC-1

## INITIAL RECORD SCREEN FAILURES

## CC - TYPE 3 DENTAL PROSTHETIC LABORATORY

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES
USAF HOSP, CANNON AFB	\$0	8756

TABLE CC-2

## DISTRIBUTION SCREEN FAILURES

## CC - TYPE 3 DENTAL PROSTHETIC LABORATORY

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES	DENTAL PROCEDURE COST	S. D. FROM LOGGED MEAN
TUSLOG DET 37, ANKARA TURKEY	\$104,520	6629	\$15.77	2.37
BROOKS USAF/HDC	\$90,503	6049	\$14.96	2.27
USAF HOSP WILLIAMS	\$24,171	17678	\$1.37	-2.10
NORTON USAF/HDC	\$429,467	30900	\$13.90	2.14
USAF HOSP, MYRTLE BEACH AFB	\$169,930	9978	\$17.03	2.51
USAF HOSP, KUNSAN KOREA	\$20,499	23148	\$0.89	-2.89
USAF CLINIC, ZWEIBRUECKEN GER	\$158,801	10981	\$14.46	2.21
USAF CLINIC, GREENHAM COMMON ENG	\$958	1201	\$0.80	-3.09

TABLE CC-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## CC - TYPE 3 DENTAL PROSTHETIC LABORATORY

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	133	\$4.74	\$1.64	\$12.38	1.40049	LT .01
GEOMETRIC MEAN COST (2 S.D.)	133	\$4.26	\$1.64	\$12.38	0.28695	GT .01

TABLE CC-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## CC - TYPE 3 DENTAL PROSTHETIC LABORATORY

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	133	\$4.26	.0023

TABLE FAB-1

INITIAL RECORD SCREEN FAILURES

FAB - TYPE 1 DENTAL PROSTHETIC LABORATORY

FACILITY NAME	TOTAL COSTS	DENTAL PROCEDURES
WALTER REED ARMY MEDICAL CENTER	\$2,046,954	0
EISENHOWER ARMY MEDICAL CENTER	\$3,063,339	0
NAVAL DENTER CENTER SAN DIEGO	\$1,265,247	0
USAF HOSP, WIESBADEN GER	\$979,858	0
LOWRY USAF/HDC	\$1,766,987	0
USAF CLINIC, KADENA JAPAN	\$773,106	0

TABLE FAB-2

DISTRIBUTION SCREEN FAILURES

FAB - TYPE 1 DENTAL PROSTHETIC LABORATORY

NO FACILITIES FAILED

TABLE FAB-3

DESCRIPTIVE STATISTICS

DISTRIBUTION SCREEN PASSES

FAB - TYPE 1 DENTAL PROSTHETIC LABORATORY

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	2	\$3.91	\$3.17	\$4.64	N/A	N/A

TABLE FAB-4

AMBULATORY WORK UNIT

DISTRIBUTION SCREEN PASSES

FAB - TYPE 1 DENTAL PROSTHETIC LABORATORY

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
ARITHMETIC MEAN	2	\$3.91	.0021



TABLE FBA-1

INITIAL RECORD SCREEN FAILURES

FBA - COMMUNITY HEALTH CLINIC

FACILITY NAME	TOTAL COSTS	TOTAL AMBULATORY VISITS
MEDDAC AUGSBURG	\$399,563	0
MEDDAC BREMERHAVEN	\$408,071	0

TABLE FBA-2

DISTRIBUTION SCREEN FAILURES

FBA - COMMUNITY HEALTH CLINIC

FACILITY NAME	TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
130TH STATION HOSPITAL	\$788,202	208	3789.43	3.58
MEDDAC VICENZA	\$410,860	143	2873.15	3.31
USA MEDDAC WUERZBURG	\$558,245	68802	\$8.11	-2.37

TABLE FBA-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## FBA - COMMUNITY HEALTH CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	43	\$105.76	\$35.09	\$489.88	2.52007	LT .01
GEOMETRIC MEAN COST (2 S.D.)	43	\$84.29	\$35.09	\$489.88	1.07066	LT .01

TABLE FBA-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## FBA - COMMUNITY HEALTH CLINIC

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
MEDIAN	43	\$71.61	.0389

TABLE FBG-1

INITIAL RECORD SCREEN FAILURES

FBG - OCCUPATIONAL HEALTH CLINIC

FY 1986 DISCOUNTED DATA

FACILITY NAME	TOTAL COSTS	TOTAL AMBULATORY VISITS
LANDSTUHL ARMY REG MED CENTER	\$227,472	0
MEDDAC AUGSBURG	\$79,382	0

TABLE FBG-2

DISTRIBUTION SCREEN FAILURES

FBG - OCCUPATIONAL HEALTH CLINIC

FY 1986 DISCOUNTED DATA

FACILITY NAME	TOTAL COSTS	TOTAL AMBULATORY VISITS	AMBULATORY VISIT COST	S. D. FROM LOGGED MEAN
MEDDAC BREMERHAVEN	\$30,362	34	\$893.00	3.78
MEDDAC FT IRWIN	\$179,099	622	\$287.94	2.28

TABLE FBG-3

## DESCRIPTIVE STATISTICS

## DISTRIBUTION SCREEN PASSES

## FBG - OCCUPATIONAL HEALTH CLINIC

## FY 1986 DISCOUNTED DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	MINIMUM COST	MAXIMUM COST	SKEWNESS	SKEWNESS P VALUE
ARITHMETIC MEAN COST (2 S.D.)	44	\$55.91	\$13.89	\$177.28	1.93540	LT .01
GEOMETRIC MEAN COST (2 S.D.)	44	\$47.01	\$13.89	\$177.28	0.56078	GT .01

TABLE FBG-4

## AMBULATORY WORK UNIT

## DISTRIBUTION SCREEN PASSES

## FBG - OCCUPATIONAL HEALTH CLINIC

## FY 1986 DISCOUNTED DATA

LOCATION PARAMETER	N	PARAMETER ESTIMATE	AMBULATORY WORK UNIT
GEOMETRIC MEAN	44	\$47.01	.0255

APPENDIX F

COMPUTER CODE FOR AWU DERIVATION

## COMPUTER CODE FOR AWU DERIVATION

Following is the computer code used to calculate AWU cost parameters and factors using the basic decision tree discussed in Chapter 2. This code is written in SAS and assumes an IBM environment. Use of this code resulted in the four formatted tables listed for each subaccount in Appendix E. If used, it is suggested that subaccount selection macros be written to accelerate processing. Macros have not been included. This code was not used to derive the AWU cost parameters and factors for those subaccounts which deviated from the basic decision tree logic (i.e., subaccounts which demonstrated instability, and new subaccounts derived using MEPRS PIND file data). In these cases subaccount specific programs were written. Programs for subaccounts deviating from the basic decision tree have not been included.

```
// EXEC SAS515,OPTIONS='NODATE NONUMBER NOCENTER PS=55'
//IN1 DD DSN="army dsn",DISP=SHR
//IN2 DD DSN="navy dsn",DISP=SHR
//IN3 DD DSN="air force dsn",DISP=SHR
DATA BAA1 BAA2;SET IN1."usa dsn" IN2."usn dsn" IN3."usaf dsn";
IF CODE2 NE "meprs subaccount code" THEN DELETE;
RECSCR = 1;IF TOTAL1 EQ 0 OR TOTNEW1 EQ 0 THEN RECSCR = 2;
IF RECSCR EQ 1 THEN OUTPUT BAA1;ELSE OUTPUT BAA2;
DATA OUT1;SET BAA2;
PROC PRINT LABEL NOOBS SPLIT='*' UNIFORM;VAR FACNAME TOTNEW1 TOTAL1;
FORMAT TOTNEW1 DOLLAR14.;
TITLE1 'TABLE BAA-1';TITLE3 'INITIAL RECORD SCREEN FAILURES';
TITLE5 'BAA - INTERNAL MEDICINE CLINIC';TITLE6 ' ';
LABEL TOTNEW1='ADJUSTED*TOTAL*COSTS'TOTAL1=' TOTAL* AMBULATORY* VISITS'
FACNAME='FACILITY*NAME';
DATA OUT2;SET BAA1;
IF CLINSAL1 EQ . THEN CLINSAL1 = 0;OUTCLIN = CLINSAL1;
NONCLIN = TOTNEW1 - OUTCLIN;
TOTNEW1 = (OUTCLIN + (NONCLIN / (1 - (INPT1 / TOTAL1)))));
NEWB = TOTNEW1/TOTAL1;NEW2 = NEWB;NEW2C = NEW2;
```

```

NEW2A = LOG(NEW2); LOGNEW2 = NEW2A; NEW2B = (NEW2 * NEW2);
PROC STANDARD MEAN=0 STD=1 OUT=OUT3; VAR NEW2A NEW2B NEW2C;
DATA BAA3 BAA4; SET OUT3;
NEWBSQ = (NEWB * NEWB);
ZSCORE1 = 1; IF (NEW2A GE 2.0) OR (NEW2A LE -2.0) THEN ZSCORE1 = 2;
IF ZSCORE1 EQ 1 THEN OUTPUT BAA3; ELSE OUTPUT BAA4;
PROC PRINT DATA=BAA4 LABEL ROUND NOOBS UNIFORM SPLIT='*';
VAR FACNAME TOTNEW1 TOTAL1 NEWB NEW2A;
FORMAT TOTNEW1 DOLLAR14. NEWB DOLLAR7.2 NEW2A 6.2;
TITLE1 'TABLE BAA-2'; TITLE3 'DISTRIBUTION SCREEN FAILURES';
TITLE5 'BAA - INTERNAL MEDICINE CLINIC'; TITLE6 ' ';
LABEL FACNAME='FACILITY*NAME' NEWB=' AMBULATORY* VISIT COST'
NEW2A=' S. D. FROM* LOGGED MEAN' TOTAL1=' TOTAL* AMBULATORY* VISITS'
TOTNEW1='ADJUSTED*TOTAL*COSTS';
PROC UNIVARIATE DATA=BAA3 NOPRINT; VAR LOGNEW2;
OUTPUT OUT=OUT6A N=N MEAN=ME2 SKEWNESS=SKEW MIN=MI MAX=M
PROC UNIVARIATE DATA=BAA3 NOPRINT; VAR NEWB;
OUTPUT OUT=OUT6B N=N MEAN=ME2 SKEWNESS=SKEW MIN=MI MAX=M
PROC UNIVARIATE DATA=BAA3 NOPRINT; VAR NEWB LOGNEW2;
OUTPUT OUT=OUT6 N=N MEAN=ME2 SKEWNESS=SKEW SKEW1;
PROC UNIVARIATE DATA=BAA3 NOPRINT; VAR NEWB NEWBSQ LOGNEW2;
OUTPUT OUT=OUT6AB N=N MEAN=ME1 ME2 SKEWNESS=SKEW SKEW1;
PROC UNIVARIATE DATA=BAA3 NOPRINT; VAR NEWB LOGNEW2;
OUTPUT OUT=OUT7 N=N MEAN=ME1 ME2 SKEWNESS=SKEW SKEW1;
PROC UNIVARIATE DATA=BAA3 NOPRINT; VAR NEWB LOGNEW2;
OUTPUT OUT=OUT7D N=N MEAN=ME1 SKEWNESS=SKEW SKEW1 MEDIAN=ME2;
DATA OUT8A; SET OUT6A;
ME2=EXP(ME2); MI=EXP(MI); MA=EXP(MA); TYPE=1;
DATA OUT8B; SET OUT6B; TYPE=2;
DATA OUT8C; SET OUT8B OUT8A;
LENGTH VARA $ 32;
IF TYPE EQ 1 THEN VARA = 'GEOMETRIC MEAN COST (2 S.D.)';
IF TYPE EQ 2 THEN VARA = 'ARITHMETIC MEAN COST (2 S.D.)';
SIG = ' GT .01';
IF ((N LE 25) AND (SKEW LT -1.061)) THEN SIG = ' LT .01';
IF ((N LE 25) AND (SKEW GT 1.061)) THEN SIG = ' LT .01';
IF ((N GT 25 AND N LE 30) AND (SKEW LT -.982)) THEN SIG = ' LT .01';
IF ((N GT 25 AND N LE 30) AND (SKEW GT .982)) THEN SIG = ' LT .01';
IF ((N GT 30 AND N LE 35) AND (SKEW LT -.921)) THEN SIG = ' LT .01';
IF ((N GT 30 AND N LE 35) AND (SKEW GT .921)) THEN SIG = ' LT .01';
IF ((N GT 35 AND N LE 40) AND (SKEW LT -.869)) THEN SIG = ' LT .01';
IF ((N GT 35 AND N LE 40) AND (SKEW GT .869)) THEN SIG = ' LT .01';
IF ((N GT 40 AND N LE 45) AND (SKEW LT -.825)) THEN SIG = ' LT .01';
IF ((N GT 40 AND N LE 45) AND (SKEW GT .825)) THEN SIG = ' LT .01';
IF ((N GT 45 AND N LE 50) AND (SKEW LT -.787)) THEN SIG = ' LT .01';
IF ((N GT 45 AND N LE 50) AND (SKEW GT .787)) THEN SIG = ' LT .01';
IF ((N GT 50 AND N LE 60) AND (SKEW LT -.723)) THEN SIG = ' LT .01';
IF ((N GT 50 AND N LE 60) AND (SKEW GT .723)) THEN SIG = ' LT .01';
IF ((N GT 60 AND N LE 70) AND (SKEW LT -.673)) THEN SIG = ' LT .01';
IF ((N GT 60 AND N LE 70) AND (SKEW GT .673)) THEN SIG = ' LT .01';
IF ((N GT 70 AND N LE 80) AND (SKEW LT -.631)) THEN SIG = ' LT .01';
IF ((N GT 70 AND N LE 80) AND (SKEW GT .631)) THEN SIG = ' LT .01';
IF ((N GT 80 AND N LE 90) AND (SKEW LT -.596)) THEN SIG = ' LT .01';

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IF ((N GT 80 AND N LE 90) AND (SKEW GT .596)) THEN SIG = ' LT .01';
IF ((N GT 90 AND N LE 100) AND (SKEW LT -.567)) THEN SIG = ' LT .01';
IF ((N GT 90 AND N LE 100) AND (SKEW GT .567)) THEN SIG = ' LT .01';
IF ((N GT 100 AND N LE 125) AND (SKEW LT -.508)) THEN SIG = ' LT .01';
IF ((N GT 100 AND N LE 125) AND (SKEW GT .508)) THEN SIG = ' LT .01';
IF ((N GT 125 AND N LE 150) AND (SKEW LT -.464)) THEN SIG = ' LT .01';
IF ((N GT 125 AND N LE 150) AND (SKEW GT .464)) THEN SIG = ' LT .01';
IF ((N GT 150 AND N LE 175) AND (SKEW LT -.430)) THEN SIG = ' LT .01';
IF ((N GT 150 AND N LE 175) AND (SKEW GT .430)) THEN SIG = ' LT .01';
IF ((N GT 175 AND N LE 200) AND (SKEW LT -.403)) THEN SIG = ' LT .01';
IF ((N GT 175 AND N LE 200) AND (SKEW GT .403)) THEN SIG = ' LT .01';
IF ((N GT 200 AND N LE 250) AND (SKEW LT -.360)) THEN SIG = ' LT .01';
IF ((N GT 200 AND N LE 250) AND (SKEW GT .360)) THEN SIG = ' LT .01';
IF N LE 2 THEN SIG = ' N/A';
RETAIN IND;
IF ((N EQ 1 AND SIG EQ ' GT .01') OR
(N EQ 1 AND SIG EQ ' N/A')) THEN IND = 2;
IF N EQ 2 AND IND EQ 2 THEN DELETE;
PROC PRINT LABEL NOOBS SPLIT='*' UNIFORM; VAR VARA N ME2 MI MA SKEW SIG;
FORMAT N 3. ME2 MI MA DOLLAR9.2 SKEW 7.5 SIG $CHAR8.;
TITLE1 'TABLE BAA-3'; TITLE3 'DESCRIPTIVE STATISTICS';
TITLE5 'DISTRIBUTION SCREEN PASSES';
TITLE7 'BAA - INTERNAL MEDICINE CLINIC'; TITLE8 ' ';
LABEL ME2='PARAMETER*ESTIMATE' MA=' MAXIMUM* COST'
VARA='LOCATION*PARAMETER' MI=' MINIMUM* COST'
SKEW=' SKEWNESS' N='N' SIG=' SKEWNESS* P VALUE';
DATA OUT8; SET OUT6; TYPE=1;
DATA OUT9; SET OUT6AB; TYPE=2; ME2 = SQRT(ME2);
DATA OUT10; SET OUT7; TYPE=3; ME2 = EXP(ME2);
DATA OUT10D; SET OUT7D; TYPE=4;
DATA OUT12; SET OUT8 OUT9 OUT10 OUT10D;
LENGTH VARA $ 25;
IF TYPE EQ 1 THEN VARA = 'ARITHMETIC MEAN';
IF TYPE EQ 2 THEN VARA = 'SQUARE TRANSFORMED MEAN';
IF TYPE EQ 3 THEN VARA = 'GEOMETRIC MEAN';
IF TYPE EQ 4 THEN VARA = 'MEDIAN';
METHOD = 1;
IF ((N LE 25) AND (SKEW LT -1.061)) THEN METHOD = 2;
IF ((N LE 25) AND (SKEW GT 1.061)) THEN METHOD = 3;
IF ((N LE 25) AND (SKEW1 GT 1.061)) THEN METHOD = 4;
IF ((N GT 25 AND N LE 30) AND (SKEW LT -.982)) THEN METHOD = 2;
IF ((N GT 25 AND N LE 30) AND (SKEW GT .982)) THEN METHOD = 3;
IF ((N GT 25 AND N LE 30) AND (SKEW1 GT .982)) THEN METHOD = 4;
IF ((N GT 30 AND N LE 35) AND (SKEW LT -.921)) THEN METHOD = 2;
IF ((N GT 30 AND N LE 35) AND (SKEW GT .921)) THEN METHOD = 3;
IF ((N GT 30 AND N LE 35) AND (SKEW1 GT .921)) THEN METHOD = 4;
IF ((N GT 35 AND N LE 40) AND (SKEW LT -.869)) THEN METHOD = 2;
IF ((N GT 35 AND N LE 40) AND (SKEW GT .869)) THEN METHOD = 3;
IF ((N GT 35 AND N LE 40) AND (SKEW1 GT .869)) THEN METHOD = 4;
IF ((N GT 40 AND N LE 45) AND (SKEW LT -.825)) THEN METHOD = 2;
IF ((N GT 40 AND N LE 45) AND (SKEW GT .825)) THEN METHOD = 3;
IF ((N GT 40 AND N LE 45) AND (SKEW1 GT .825)) THEN METHOD = 4;
IF ((N GT 45 AND N LE 50) AND (SKEW LT -.787)) THEN METHOD = 2;

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IF ((N GT 45 AND N LE 50) AND (SKEW GT .787)) THEN METHOD = 3;
IF ((N GT 45 AND N LE 50) AND (SKEW1 GT .787)) THEN METHOD = 4;
IF ((N GT 50 AND N LE 60) AND (SKEW LT -.723)) THEN METHOD = 2;
IF ((N GT 50 AND N LE 60) AND (SKEW GT .723)) THEN METHOD = 3;
IF ((N GT 50 AND N LE 60) AND (SKEW1 GT .723)) THEN METHOD = 4;
IF ((N GT 60 AND N LE 70) AND (SKEW LT -.673)) THEN METHOD = 2;
IF ((N GT 60 AND N LE 70) AND (SKEW GT .673)) THEN METHOD = 3;
IF ((N GT 60 AND N LE 70) AND (SKEW1 GT .673)) THEN METHOD = 4;
IF ((N GT 70 AND N LE 80) AND (SKEW LT -.631)) THEN METHOD = 2;
IF ((N GT 70 AND N LE 80) AND (SKEW GT .631)) THEN METHOD = 3;
IF ((N GT 70 AND N LE 80) AND (SKEW1 GT .631)) THEN METHOD = 4;
IF ((N GT 80 AND N LE 90) AND (SKEW LT -.596)) THEN METHOD = 2;
IF ((N GT 80 AND N LE 90) AND (SKEW GT .596)) THEN METHOD = 3;
IF ((N GT 80 AND N LE 90) AND (SKEW1 GT .596)) THEN METHOD = 4;
IF ((N GT 90 AND N LE 100) AND (SKEW LT -.567)) THEN METHOD = 2;
IF ((N GT 90 AND N LE 100) AND (SKEW GT .567)) THEN METHOD = 3;
IF ((N GT 90 AND N LE 100) AND (SKEW1 GT .567)) THEN METHOD = 4;
IF ((N GT 100 AND N LE 125) AND (SKEW LT -.508)) THEN METHOD = 2;
IF ((N GT 100 AND N LE 125) AND (SKEW GT .508)) THEN METHOD = 3;
IF ((N GT 100 AND N LE 125) AND (SKEW1 GT .508)) THEN METHOD = 4;
IF ((N GT 125 AND N LE 150) AND (SKEW LT -.464)) THEN METHOD = 2;
IF ((N GT 125 AND N LE 150) AND (SKEW GT .464)) THEN METHOD = 3;
IF ((N GT 125 AND N LE 150) AND (SKEW1 GT .464)) THEN METHOD = 4;
IF ((N GT 150 AND N LE 175) AND (SKEW LT -.430)) THEN METHOD = 2;
IF ((N GT 150 AND N LE 175) AND (SKEW GT .430)) THEN METHOD = 3;
IF ((N GT 150 AND N LE 175) AND (SKEW1 GT .430)) THEN METHOD = 4;
IF ((N GT 175 AND N LE 200) AND (SKEW LT -.403)) THEN METHOD = 2;
IF ((N GT 175 AND N LE 200) AND (SKEW GT .403)) THEN METHOD = 3;
IF ((N GT 175 AND N LE 200) AND (SKEW1 GT .403)) THEN METHOD = 4;
IF ((N GT 200 AND N LE 250) AND (SKEW LT -.360)) THEN METHOD = 2;
IF ((N GT 200 AND N LE 250) AND (SKEW GT .360)) THEN METHOD = 3;
IF ((N GT 200 AND N LE 250) AND (SKEW1 GT .360)) THEN METHOD = 4;
IF N LE 2 THEN METHOD = 1; IF TYPE NE METHOD THEN DELETE;
HCU3 = (ME2 / 1840.4269);
PROC PRINT LABEL NOOBS SPLIT='*' UNIFORM ROUND; VAR VARA N ME2 HCU3;
FORMAT N 5. ME2 DOLLAR15.2 HCU3 5.4;
TITLE1 'TABLE BAA-4'; TITLE3 'AMBULATORY WORK UNIT';
TITLE5 'DISTRIBUTION SCREEN PASSES';
TITLE7 'BAA - INTERNAL MEDICINE CLINIC'; TITLE8 ' ';
LABEL VARA='LOCATION*PARAMETER' HCU3=' AMBULATORY* WORK UNIT'
ME2='PARAMETER*ESTIMATE'

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END

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